iProSecu

User Manual

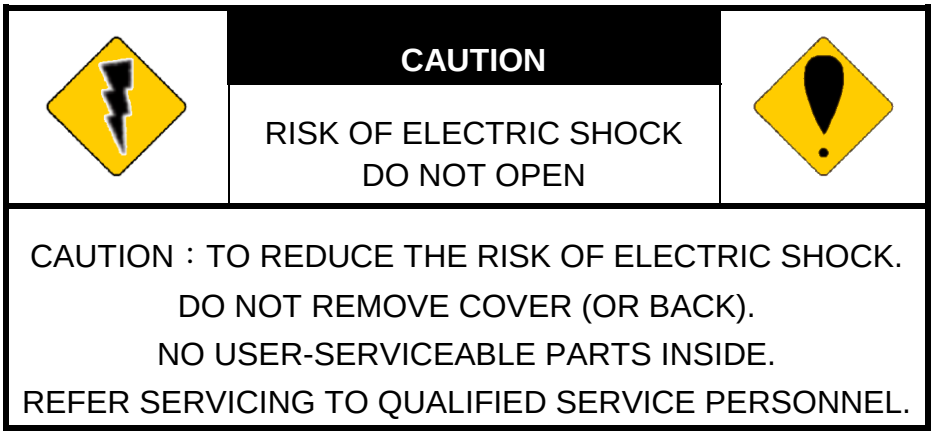
IP VANDAL DOME CAMERA

iDC-1DCF

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MISTURE.
DO NOT INSERT ANY METALLIC OBJECT THROUGH VENTILATION GRILLS.

CAUTION


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION：TO REDUCE THE RISK OF ELECTRIC SHOCK.
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

COPYRIGHT

THE TRADEMARKS MENTIONED IN THE MANUAL ARE LEGALLY REGISTERED TO THEIR RESPECTIVE COMPANIES.

iProSecu

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V1.0_20140128

I. Preface

This is a 1/3.2” CMOS sensor IP camera with a built-in web server. The user can view real-time video via IE browser. It supports H.264, M-JPEG and MPEG4 video compression, providing smooth and high video quality. The video can be stored in a Micro SD card and playback remotely.

With a user friendly interface, it is an easy-to-use IP camera for security applications.

II. Product Specifications

- 5 Megapixel Vandal Dome
- Support Full HD 1080P Real Time
- Adjustable External Vari-focal Lens
- 3D+2D Digital Noise Reduction
- Support Digital Wide Dynamic Range
- Power over Ethernet
- Built-in IR LED, 15M
- IR Cut Filter mechanism
- H.264/ M-JPEG/ MPEG4 Compression
- Micro SD Card Backup (Optional)
- 2-way Audio
- Video Output
- Support iPhone/iPad/Android
- SDK for Software Integration

Hardware	
CPU	ARM 9 ,32 bit RISC
RAM	256MB
Flash	16MB
Image sensor	1/3.2” Megapixel CMOS sensor
Lens Type	Vari-focal Lens 3-9mm@F1.8
Sensitivity	**Color :** 0.5 Lux (AGC ON) **B / W:** 0.1 Lux (AGC ON)
Angle of View	27.31° ~ 75.22° (H) 19.09° ~ 54.16° (V)
ICR	IR cut Filter Mechanism (optional)
LED	Built-in 18 IR LED IR Distance 15M
I/O	1 DI / 1 DO
Video Output	Yes
Audio	G.711(64K) and G.726(32K,24K) **Input :** External Audio in **Output:** External Line out
Power over Ethernet	Yes, PoE Class 0 (IEEE802.3af)
Power	DC 12V Max: 4.8W(IR ON), 6.1W(IR OFF) PoE Max: 802.3af, 5.8W(IR ON), 7.2W(IR OFF)
Operating Temperature	-10°C ~ 45°C
Dimensions	φ150mm x 102.5mm (H)
Weight	1300 g
Network	
Ethernet	10/ 100 Base-T
Network Protocol	IPv6, IPv4, HTTP, HTTPS, SNMP, QoS/DSCP, Access list, IEEE 802.1X, RTSP, TCP/ IP, UDP, SMTP, FTP, PPPoE, DHCP, DDNS, NTP, UPnP, 3GPP, SAMBA, Bonjour
System	
Video Resolution	2592x1944@15fps, 2048x1536@15fps, 1920x1080@30fps, 1280x720@30fps, 640x480@30fps, 320x240@30fps, 176x144@30fps

Video Adjust	Brightness, Contrast, Hue, Saturation, Sharpness, Shutter Speed adjustable, AGC, Sense-Up, D-WDR, Flip, Mirror, Noise reduction, Day & Night adjustable, White Balance
Triple Streaming	Yes
Image snapshot	Yes
Full screen monitoring	Yes
Privacy Mask	Yes, 3 different areas
Compression format	H.264/ M-JPEG/ MPEG4(3GPP Only)
Video bitrates adjust	CBR, VBR
Motion Detection	Yes, 3 different areas
Triggered action	Mail, FTP, Save to SD card, DO, SAMBA
Pre/ Post alarm	Yes, configurable
Security	Password protection, IP address filtering, HTTPS encrypted data transmission, 802.1X port-based authentication for network protection
Firmware upgrade	HTTP mode, can be upgraded remotely
Simultaneous connection	Up to 10
SD card management	
Recording trigger	Motion Detection, IP check, Network break down (wire only), Schedule, DI
Video format	AVI, JPEG
Video playback	Yes
Delete files	Yes
Client System requirement	
OS	Windows 7, 2000, XP, 2003, Microsoft IE 6.0 or above, Chrome, Safari, Firefox
Mobile Support	iOS 4.3 or above, Android 1.6 or above.
Hardware Suggested	Intel Dual Core 2.8G,RAM: 4GB

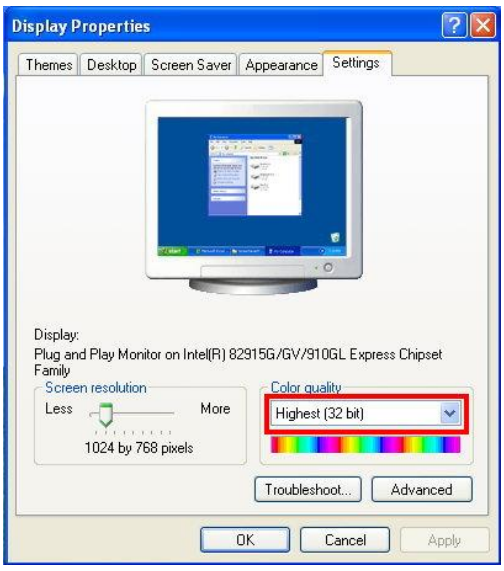
*SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTIFICATION.

III. Product Installation

A. Monitor Settings

i. Right-Click on the desktop. Select “Properties”

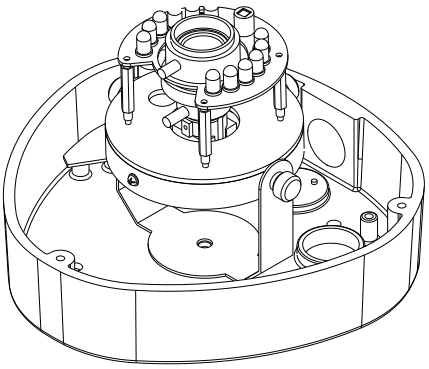
ii. Change the color quality to the highest (32bit).

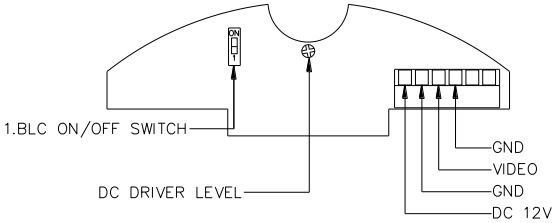


B. Hardware Installation

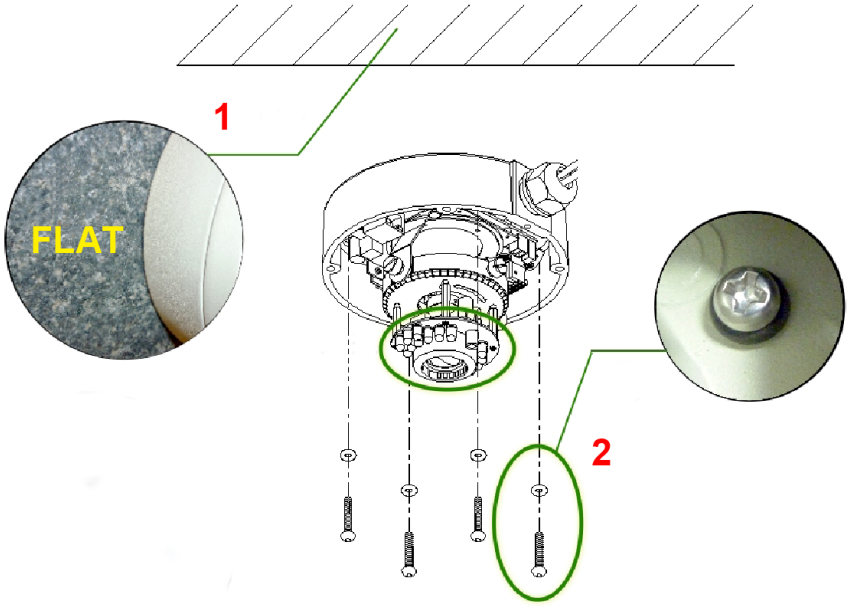
I. Connector Instruction

Open the cover to find the following structure. Connect the power adaptor first, then connect the IP Camera to the PC or network, and set up the network configurations according to the network environment.





II. Installation



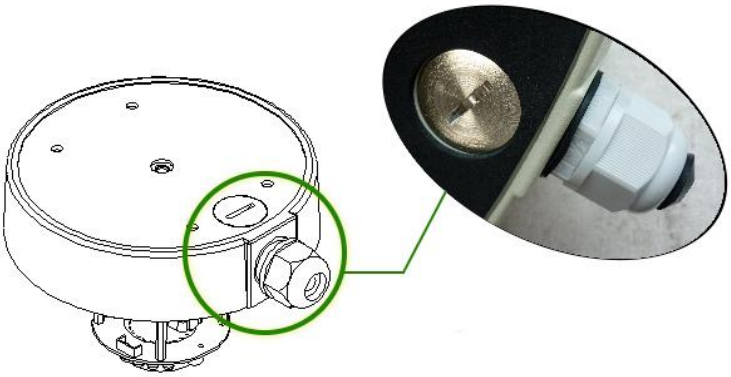
Picture based on another IP Camera model

1. Install the vandal dome on a flat surface. (The dome housing doesn't necessarily be opened)

2. When you mount the camera housing please use the screws with the black rubber o-rings. Without the o-ring, the water may seep into the machine.

3. When using separate cables for Power and Internet, please use silicon in the cable gland around the cables, just as shown in the following picture.

4. The unused cable outlet hole must be closed, and the waterproof connector on the used hole must be locked closely.

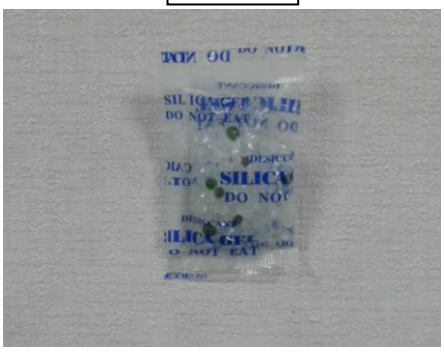


5. If the dome housing was opened during installation, open the package

containing the **Silica Gel** and place it inside the dome for avoiding humidity inside of it.

Step 1

Step 2



Step 3

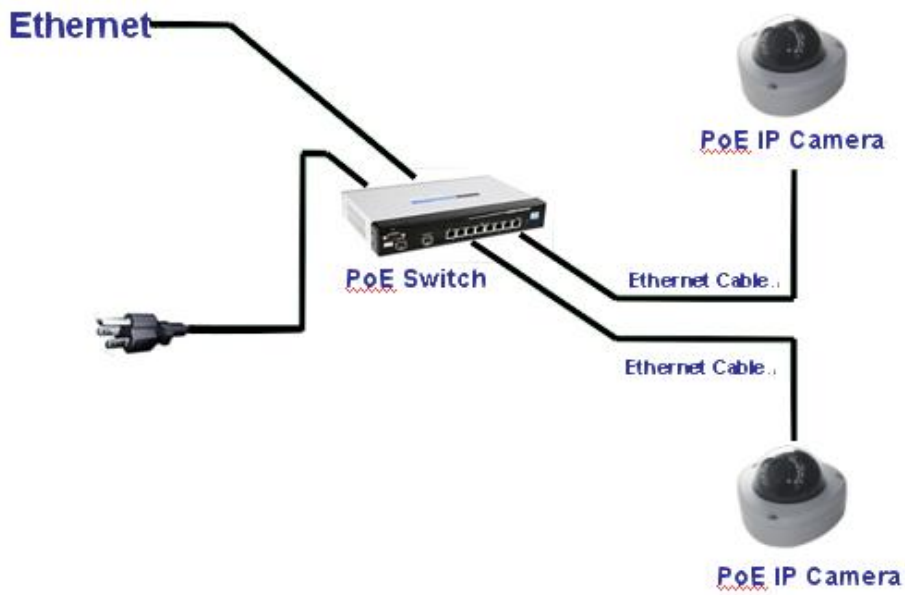
6. When closing the dome, make sure there are no cables around the screws, and slowly lock them at the same time, applying equal force in all of the screws. Do not totally lock one screw at a time; otherwise the closing might not be equal in all the screws.

7. After locking all the screws, make sure that the space between top-bottom sides disappeared.

III. PoE (Power Over Ethernet)(Optional) 802.3af, 15.4W PoE Switch is recommended

Power over Ethernet (PoE) is a technology that integrates power into a standard LAN infrastructure. It allows providing power to a network device, such as an IP phone or a network camera, using the same cable as that used for network connection. It eliminates the need for power outlets at the

camera location and allows an easier application of uninterruptible power supplies (UPS) to ensure a 24 hours a day, 7 days a week operation.



C. IP Assignment

i. Use the software, “IP Scanner” to assign the IP address of the IP Camera. The software is in the attached software CD.

ii. There is only one language version for IP Scanner:

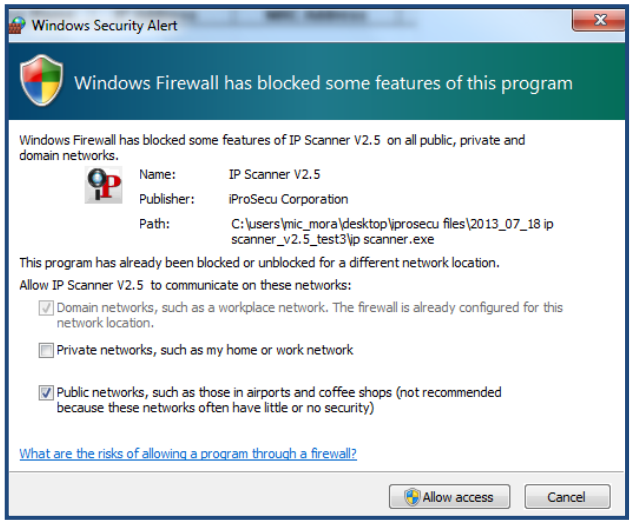
IP Scanner.exe：English version

iii. There are 3 kinds of IP configuration:

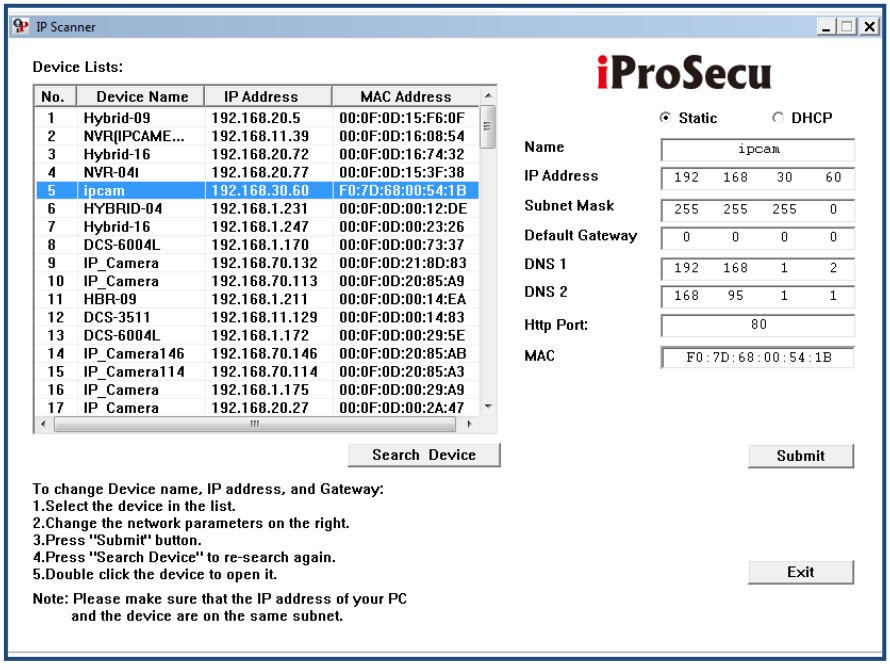
a. Fixed IP (Public IP or Virtual IP)
b. DHCP (Dynamic IP)
c. Dial-up (PPPoE)

iv. Execute IP Scanner

v. For Windows XP SP2 user, it may popup the following message box. Please click “Unblock”.


Windows Security Alert
Windows Firewall has blocked some features of this program
Windows Firewall has blocked some features of IP Scanner V2.5 on all public, private and domain networks.
Name: IP Scanner V2.5
Publisher: iProSecu Corporation
Path: C:\users\mic_mora\desktop\iprosecu files\2013_07_18 ip scanner_v2.5_test3\ip scanner.exe
This program has already been blocked or unblocked for a different network location.
Allow IP Scanner V2.5 to communicate on these networks:
Domain networks, such as a workplace network. The firewall is already configured for this network location.
Private networks, such as my home or work network
Public networks, such as those in airports and coffee shops (not recommended because these networks often have little or no security)
What are the risks of allowing a program through a firewall?
Allow access
Cancel

vi. IP Scanner configuration:


IP Scanner
Device Lists:
No. Device Name IP Address MAC Address
1 Hybrid-09 192.168.20.5 00:0F:0D:15:F6:0F
2 NVR(IPCAME... 192.168.11.39 00:0F:0D:16:08:54
3 Hybrid-16 192.168.20.72 00:0F:0D:16:74:32
4 NVR-04I 192.168.20.77 00:0F:0D:15:3F:38
5 ipcam 192.168.30.60 F0:7D:68:00:54:1B
6 HYBRID-04 192.168.1.231 00:0F:0D:00:12:DE
7 Hybrid-16 192.168.1.247 00:0F:0D:00:23:26
8 DCS-6004L 192.168.1.170 00:0F:0D:00:73:37
9 IP_Camera 192.168.70.132 00:0F:0D:21:8D:83
10 IP_Camera 192.168.70.113 00:0F:0D:20:85:A9
11 HBR-09 192.168.1.211 00:0F:0D:00:14:EA
12 DCS-3511 192.168.11.129 00:0F:0D:00:14:83
13 DCS-6004L 192.168.1.172 00:0F:0D:00:29:5E
14 IP_Camera146 192.168.70.146 00:0F:0D:20:85:AB
15 IP_Camera114 192.168.70.114 00:0F:0D:20:85:A3
16 IP_Camera 192.168.1.175 00:0F:0D:00:29:A9
17 IP_Camera 192.168.20.27 00:0F:0D:00:2A:47
Search Device
iProSecu
Static DHCP
Name ipcam
IP Address 192 168 30 60
Subnet Mask 255 255 255 0
Default Gateway 0 0 0 0
DNS 1 192 168 1 2
DNS 2 168 95 1 1
Http Port: 80
MAC F0:7D:68:00:54:1B
Submit
To change Device name, IP address, and Gateway:
1.Select the device in the list.
2.Change the network parameters on the right.
3.Press "Submit" button.
4.Press "Search Device" to re-search again.
5.Double click the device to open it.
Note: Please make sure that the IP address of your PC and the device are on the same subnet.
Exit

vii. IP Scanner will search all IP Cameras connected on LAN. The user can

click “Search Device” to search again.

viii. Click one of the IP Cameras listed on the left side. The network configuration of this IP camera will be shown on the right side. You may change the “name” of the IP Camera to your preference (e.g.: Office, warehouse). Change the parameter and click “Submit” then click “OK”. It will apply the changes and reboot the device.

ix. Please make sure the subnet of the PC IP address and the IP Camera IP address are the same.

The same Subnet:

IP CAM IP address: 192.168.1.200

PC IP address: 192.168.1.100

Different Subnets:

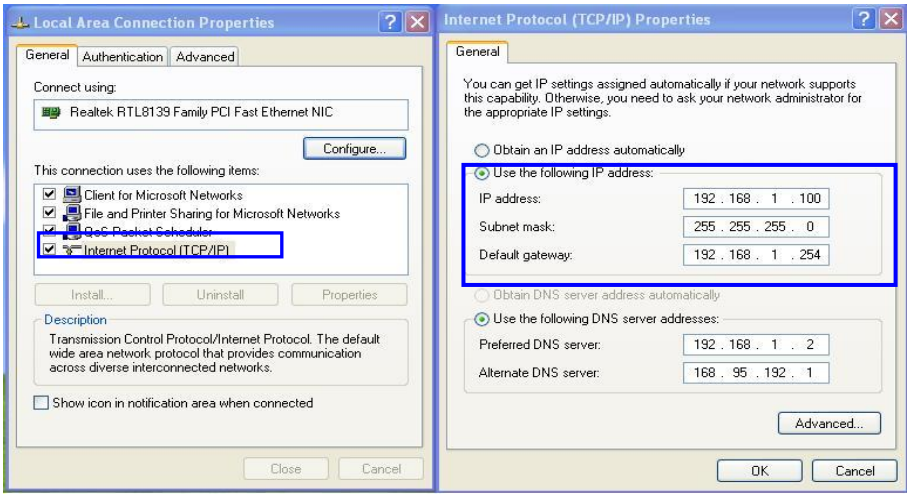
IP CAM IP address: 192.168.2.200

PC IP address: 192.168.1.100

To Change the PC IP address:

Control Panel→Network Connections→Local Area Connection Properties→Internet Protocol (TCP/IP) →Properties

Please to make sure your IP Camera and PC are in the same Subnet. If not, please change IP Camera subnet or PC IP subnet accordingly.


Local Area Connection Properties
General
Authentication
Advanced
Connect using:
Realtek RTL8139 Family PCI Fast Ethernet NIC
Configure...
This connection uses the following items:
Client for Microsoft Networks
File and Printer Sharing for Microsoft Networks
Internet Protocol (TCP/IP)
Install...
Uninstall
Properties
Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.
Show icon in notification area when connected
Close
Cancel
Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address: 192 . 168 . 1 . 100
Subnet mask: 255 . 255 . 255 . 0
Default gateway: 192 . 168 . 1 . 254
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server: 192 . 168 . 1 . 2
Alternate DNS server: 168 . 95 . 192 . 1
Advanced...
OK
Cancel

x. A quick way to access remote monitoring is to left-click the mouse twice on a selected IP Camera listed on “Device list” of the IP Scanner software. An IE browser will be opened.

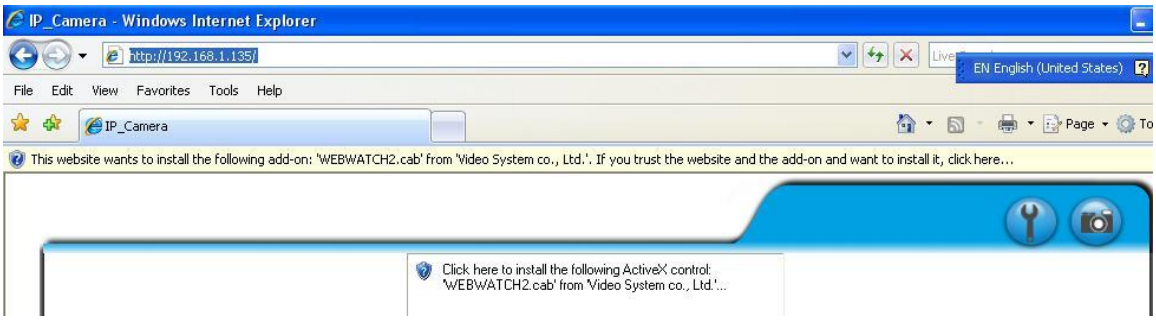
xi. Then, please key-in the default “**user name: admin**” and “**password: admin**”.

D. Install ActiveX control

1. For users of IE 6.0 or above:

For the first time to view the camera video via IE, it will ask you to install the

ActiveX component.


IP_Camera - Windows Internet Explorer
http://192.168.1.135/
File Edit View Favorites Tools Help
IP_Camera
This website wants to install the following add-on: 'WEBWATCH2.cab' from 'Video System co., Ltd.'. If you trust the website and the add-on and want to install it, click here...
Click here to install the following ActiveX control:
'WEBWATCH2.cab' from 'Video System co., Ltd.'...

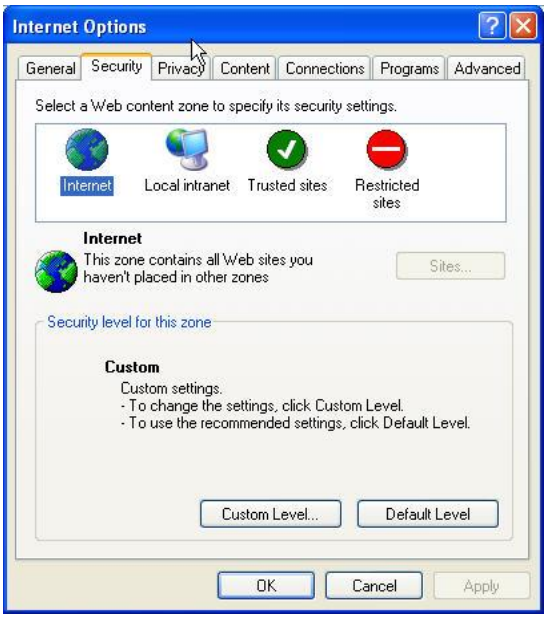
1. If the installation failed, please check the security setting for the IE browser.

i. IE → Tools → Internet Options… → Security Tab → Custom Level… → Security Settings → Download unsigned ActiveX controls→ Select "Enable" or Prompt.

ii. IE → Tools → Internet Options… → Security Tab → Custom Level… →Initialize and script ActiveX controls not marked as safe → Select "Enable" or Prompt.

1

2



3

4

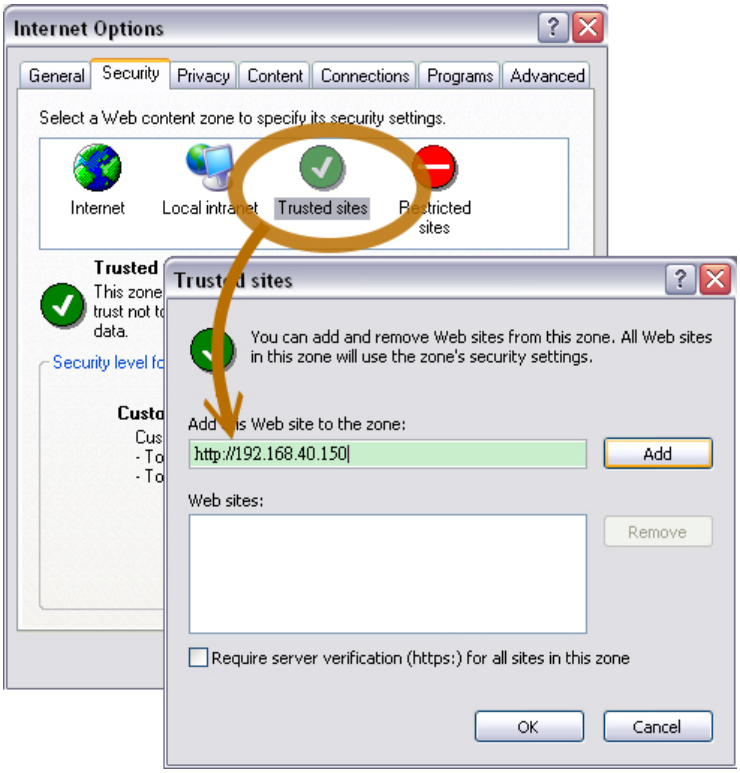
5

When popup the following dialogue box, click “Yes”.

2. You can choose another way:

Go to: IE→Tools → Internet Options… → Security Tab → Trusted sites → Add the IP address and click "OK".

In the site list you can key one single IP address or a LAN address. For example, if you add "192.168.21.*", all the IP address under .21 LAN will be regarded as trusted sites.

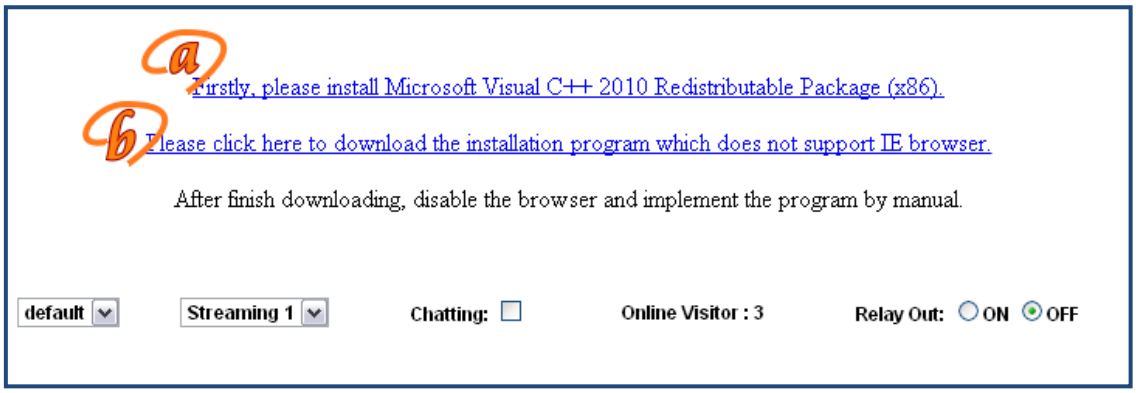


2. To Non-IE Web Browser Users

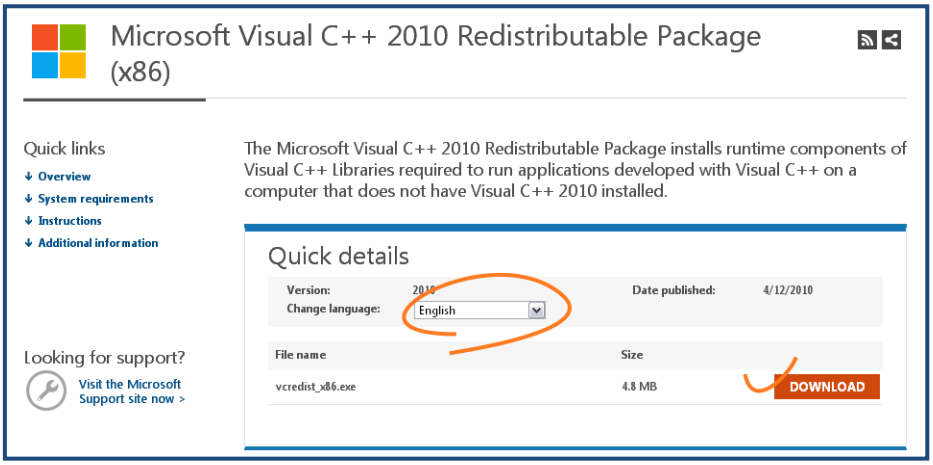
If you use Firefox or Google chrome to access the IP camera but fail to watch the live video, please follow the steps to install necessary tools:
(The following pictures are based on chrome.)

a. You may see the prompt message as the picture below. First, click the link:

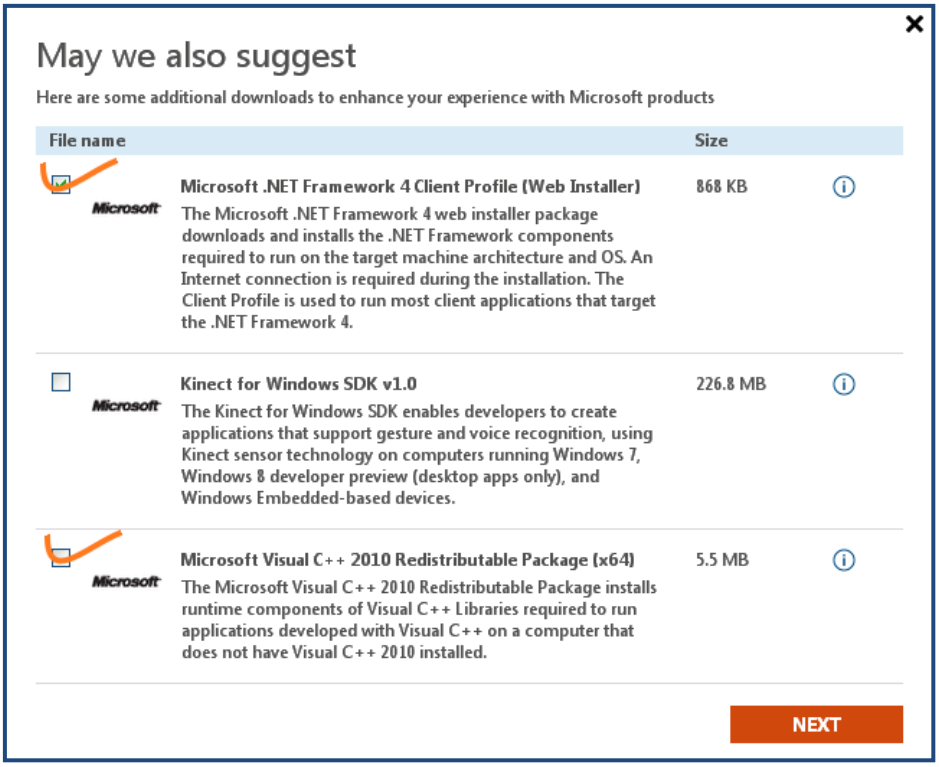
"Firstly, please install Microsoft Visual C++ 2010 Redistributable Package (x86)."


a
Firstly, please install Microsoft Visual C++ 2010 Redistributable Package (x86).
b
Please click here to download the installation program which does not support IE browser.
After finish downloading, disable the browser and implement the program by manual.
default
Streaming 1
Chatting:
Online Visitor : 3
Relay Out: ON OFF

The link conducts you to the Microsoft official site where you can download the tools. Please select the language and click "download".



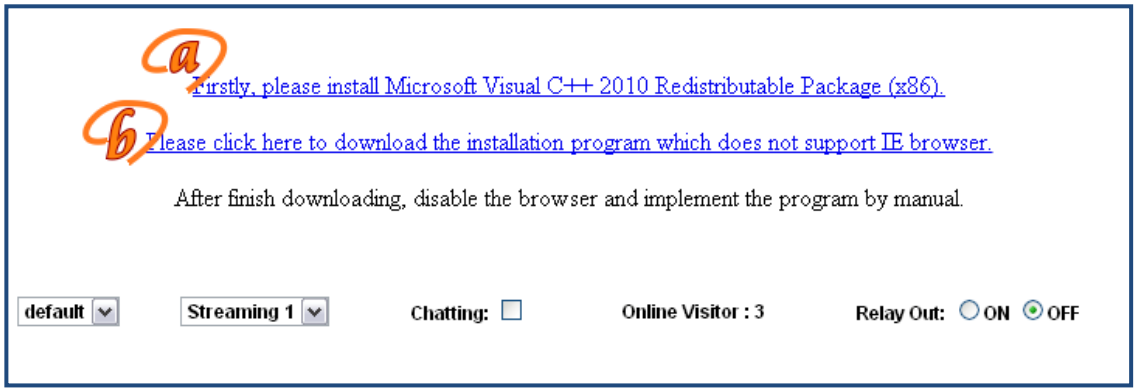
In the pop-up window, please tick the first and the third file as the picture below. Click "Next" to download both "Microsoft .NET Framework 4 Client Profile (Web Installer)" and "Microsoft Visual C++ 2010 Redistributable Package (x64)".


May we also suggest
Here are some additional downloads to enhance your experience with Microsoft products
File name
Size
Microsoft .NET Framework 4 Client Profile (Web Installer)
The Microsoft .NET Framework 4 web installer package downloads and installs the .NET Framework components required to run on the target machine architecture and OS. An Internet connection is required during the installation. The Client Profile is used to run most client applications that target the .NET Framework 4.
868 KB
Kinect for Windows SDK v1.0
The Kinect for Windows SDK enables developers to create applications that support gesture and voice recognition, using Kinect sensor technology on computers running Windows 7, Windows 8 developer preview (desktop apps only), and Windows Embedded-based devices.
226.8 MB
Microsoft Visual C++ 2010 Redistributable Package (x64)
The Microsoft Visual C++ 2010 Redistributable Package installs runtime components of Visual C++ Libraries required to run applications developed with Visual C++ on a computer that does not have Visual C++ 2010 installed.
5.5 MB
NEXT

After finishing downloading, execute the two files respectively to install them. The windows may ask you to reboot the PC when the installation is finished.

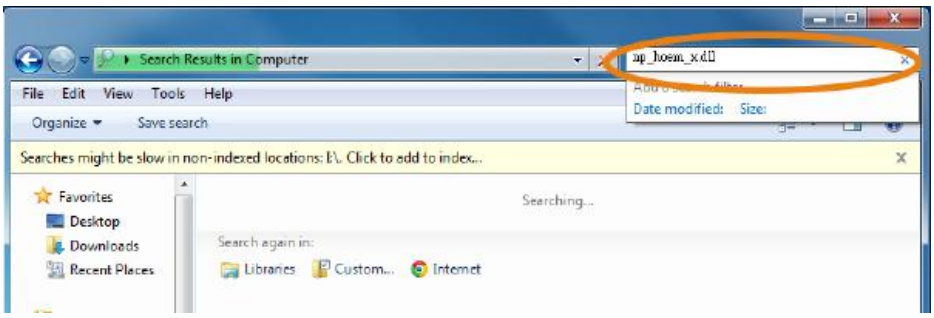
b. Then, click the second link "Please click here to download the installation program which does not support IE browser." to download Setup ActiveX.

After finishing the downloading, execute the files to install ActiveX. Then restart the browser.

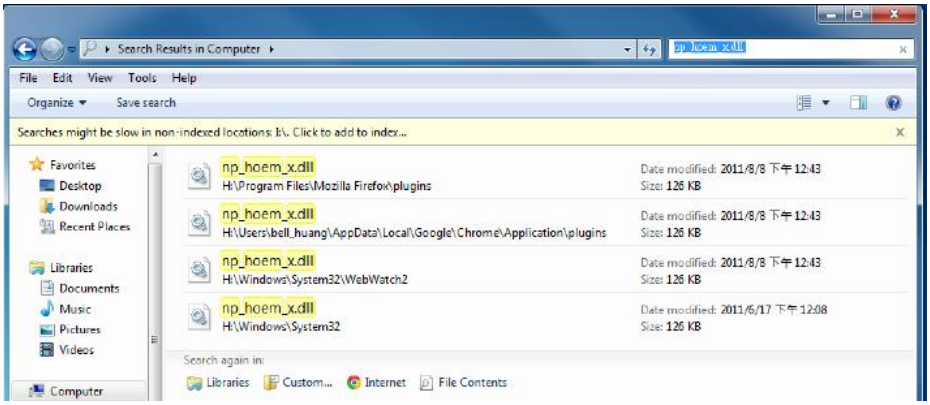

a
Firstly, please install Microsoft Visual C++ 2010 Redistributable Package (x86).
b
Please click here to download the installation program which does not support IE browser.
After finish downloading, disable the browser and implement the program by manual.
default
Streaming 1
Chatting:
Online Visitor : 3
Relay Out: ON OFF

c. If you execute the steps above but still cannot see the live video normally, please try the following solution:

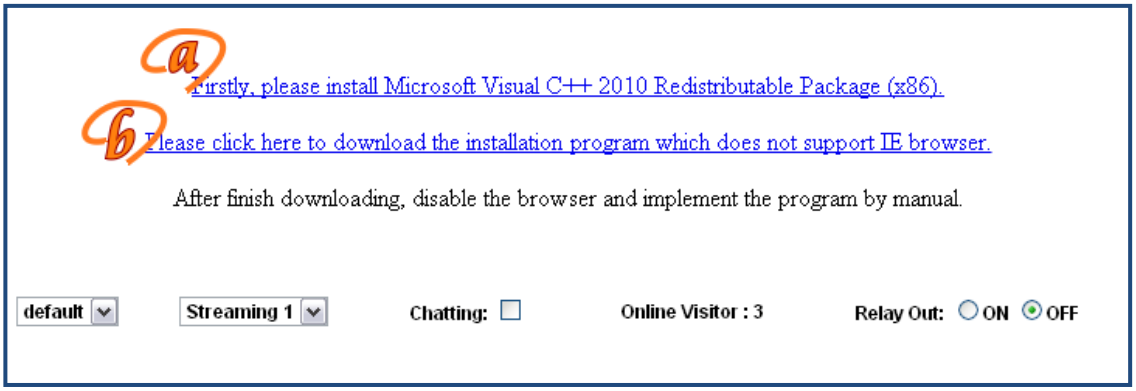
Search for the file "np_hoem_x.dll" in your system disk. For Windows XP users, please go to "Start" → "Search" → Search for "All files and folders" and key-in "np_hoem_x.dll". For Windows 7 users, please use the search bar on the top-right of the Windows Explorer.



Delete all the files named "np_hoem_x.dll". They're the ActiveX control tools installed in your computer, but the old version of ActiveX might not compatible with the new version of browser. Therefore, they need to be deleted in order to install the latest ActiveX control.



Start your web browser, and repeat the step 2-b: "Download the installation program which does not support IE browser" to download and install ActiveX.


a
Firstly, please install Microsoft Visual C++ 2010 Redistributable Package (x86).
b
Please click here to download the installation program which does not support IE browser.
After finish downloading, disable the browser and implement the program by manual.
default
Streaming 1
Chatting:
Online Visitor : 3
Relay Out: ON OFF

IV. Live Video

Start an IE browser, type the IP address of the IP camera in the address field. It will show the following dialogue box. Key-in the user name and password. The default user name and password are “**admin**” and “**admin**”.

When the IP Camera is connected successfully, it shows the following program interface:

Double-click the video to switch to full screen view. Press “Esc” or double-click the video again back to normal mode.

1. Get into administration page

2. Video Snapshot

3. Show system time, video resolution, and video refreshing rate

4. Adjust image, 1/2x, 1x, 2x

5. Select the video streaming source (If streaming 2 is closed in ”Video Setting”, the option will not appear.)

6. The IP Camera supports 2-way audio. Click the “Chatting” check box for using a microphone connected to the PC and talk to the Camera side.

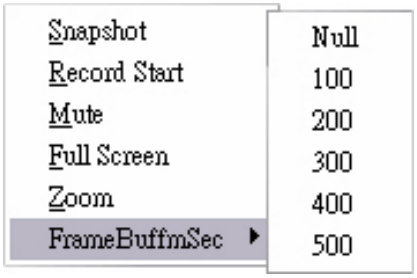
7. Show how many people are connected to this IP camera.

8. Tick the Relay out "ON" box to trigger the relay output for testing. Tick "Off" to stop triggering.

9. Focus bar: It will display a focus bar in the top-left corner, on the live video image for 3 minutes. The bar will be displayed as full if the camera is totally focused towards the objective.

Double-click the video; it will change to full screen mode. Press “Esc” or double-click the video again, it will change back to normal mode.

Right-Click the mouse on the video, it will show a pop-up menu.



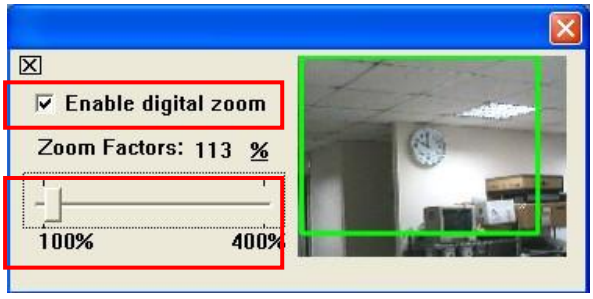
1. Snapshot：Save a JPEG picture

2. Record Start: Record video in the local PC. It will ask you where to save the video. To stop recording, right-click again, select “Record Stop”. The video format is AVI. Use Microsoft Media Player to play the recorded file.

3. Mute: Turn off the audio. Click again to turn it on.

4. Full Screen: Full-screen mode.

5. ZOOM: Enable zoom-in and zoom-out functions. Select “Enable digital zoom” option first on the pop-up dialogue box and then drag and drop the bar to adjust the zoom factors.

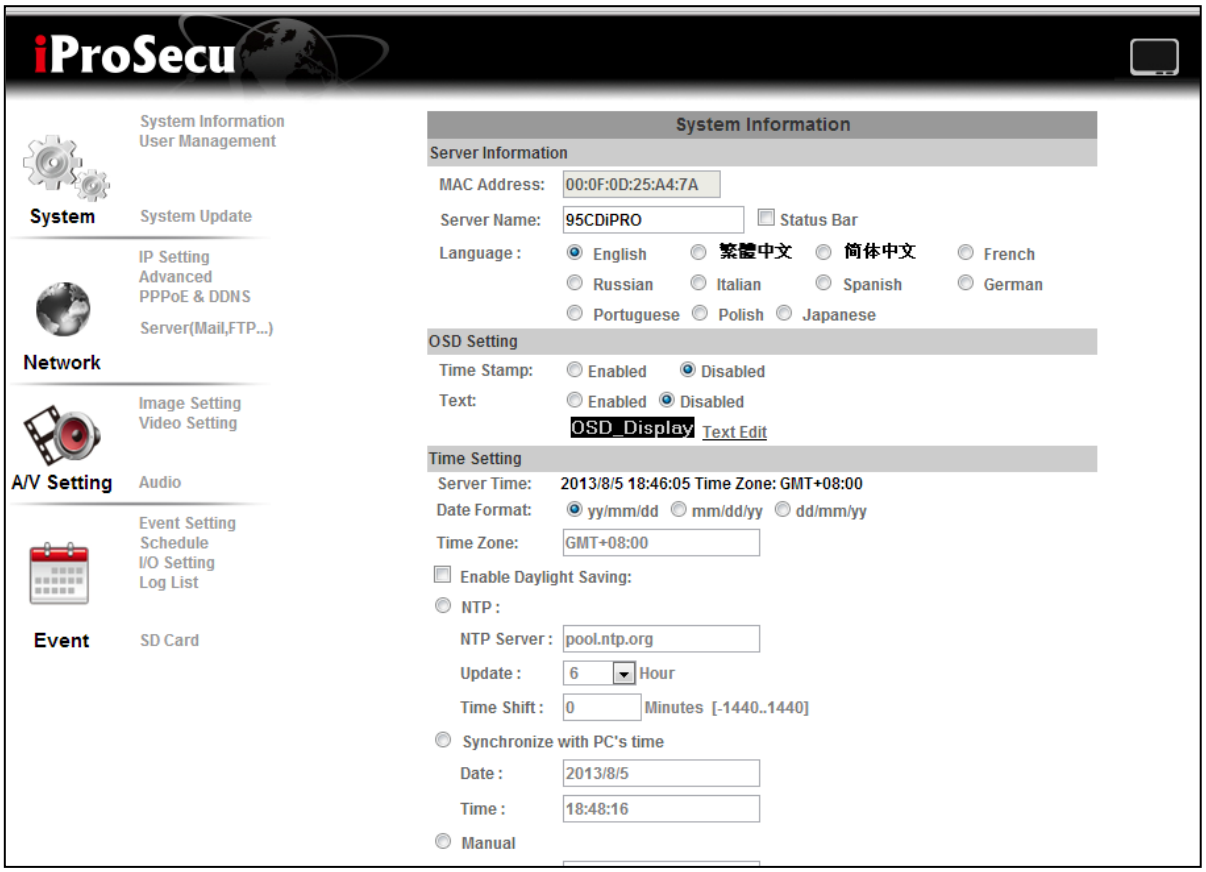


6. Frame Buffm Sec: Build a buffm to accumulate several video frames and play them at regular intervals. This function can keep the video smoothly when the Network speed is slow. If you select “100”, the interval between every frame is

fixed to 100 mSec. The slower the Network is, the bigger the value to be selected. The default value is null.

V. IP Camera Configuration

Click to get into the administration page. Click to go back to the live video page.



A. System

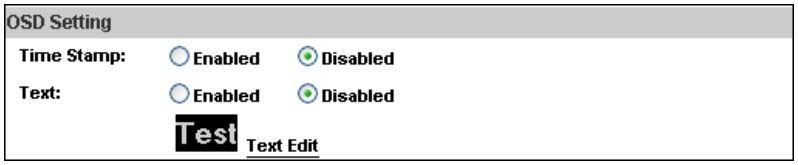
I. System Information

a. Server Information: Set up the camera name, select language, and set up the camera time.

1. Server Name: This is the Camera name. This name will be shown on the IP Scanner.

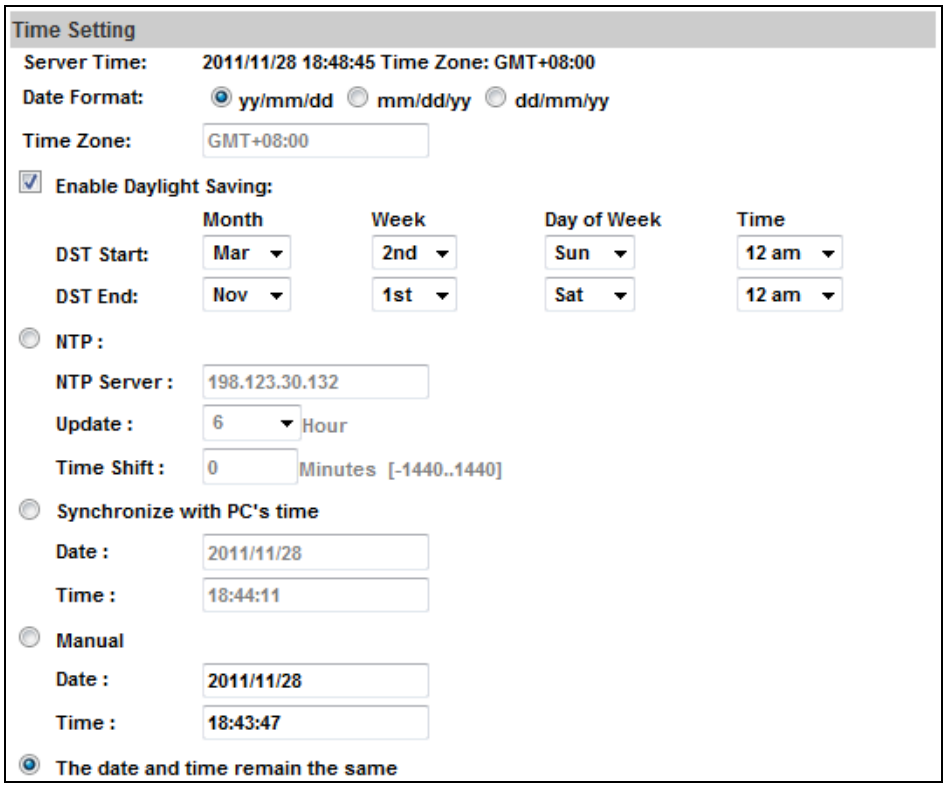
2. Select language: Select between English, Traditional Chinese, and Simplified. When it changes, it will show the following dialogue box to confirm that the language has changed.

b. OSD Setting: Select a position where the date & time stamp / text are shown on the screen.



Moreover, click “Text Edit” for changing the OSD content, including text size and alpha. Finally, click the Upgrade button to keep the settings.

c. Server time setting: Select between the options to set up time - “NTP”, “Synchronize with PC’s time”, “Manual”, “The date and time remain the same”.


Time Setting
Server Time: 2011/11/28 18:48:45 Time Zone: GMT+08:00
Date Format: yy/mm/dd mm/dd/yy dd/mm/yy
Time Zone: GMT+08:00
Enable Daylight Saving:
Month Week Day of Week Time
DST Start: Mar 2nd Sun 12 am
DST End: Nov 1st Sat 12 am
NTP :
NTP Server : 198.123.30.132
Update : 6 Hour
Time Shift : 0 Minutes [-1440..1440]
Synchronize with PC's time
Date : 2011/11/28
Time : 18:44:11
Manual
Date : 2011/11/28
Time : 18:43:47
The date and time remain the same

• Server Time: It shows the current IP Camera server time.

• Date Format: Select the date display format.

• Time Zone: Select your time zone. It affects server time when you use “NTP” time.

• Enable Daylight Saving: Give the start and end daylight saving time.

During daylight saving, the time will be 1 hour faster.

• NTP: Key-in the NTP server IP address and update interval. The camera time will be synchronized with NTP server time. To use this option, if the NTP Server is under WAN, the camera must be set to access WAN.

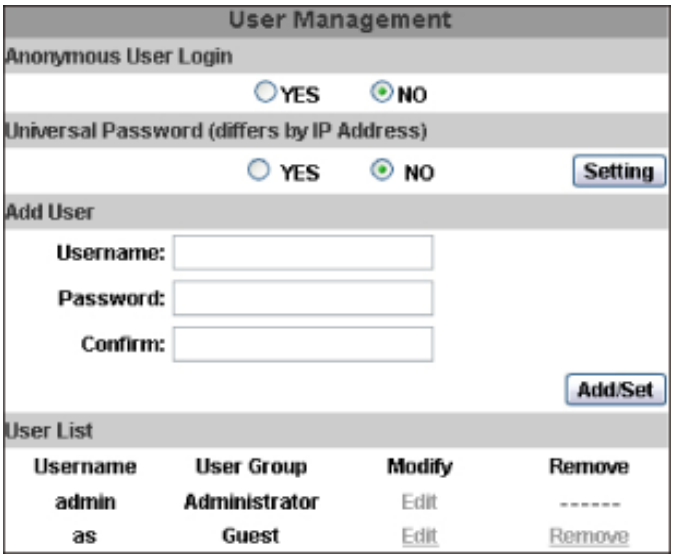
• Synchronize with PC’s time: In “Date” and “Time” column it shows your current PC time. Click “Apply” to make the camera time the same with PC time.

• Manual: Key-in the date and time, and click “Apply”.

• The date and time remain the same: After you select “Synchronize with PC’s time” or “Manual”, and click “Apply”, the selected mark will jump to this option.

II. User Management

The IP Camera supports different types of user: administrator, general user, and anonymous user.



a. Anonymous User Login:

Select “Yes” for allowing everybody to watch live video without username and password. However, if you try to enter the configuration page the camera will ask you to key-in username and password.

Select "No" for requiring a username and password to access the camera.

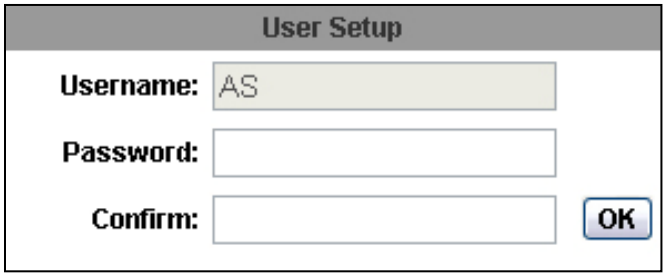
b. Universal Password:

Select “Yes” for allowing login to this IP Camera by universal password. Please refer to “Universal Password” chapter for more explanations. Select “No” for disabling universal password.

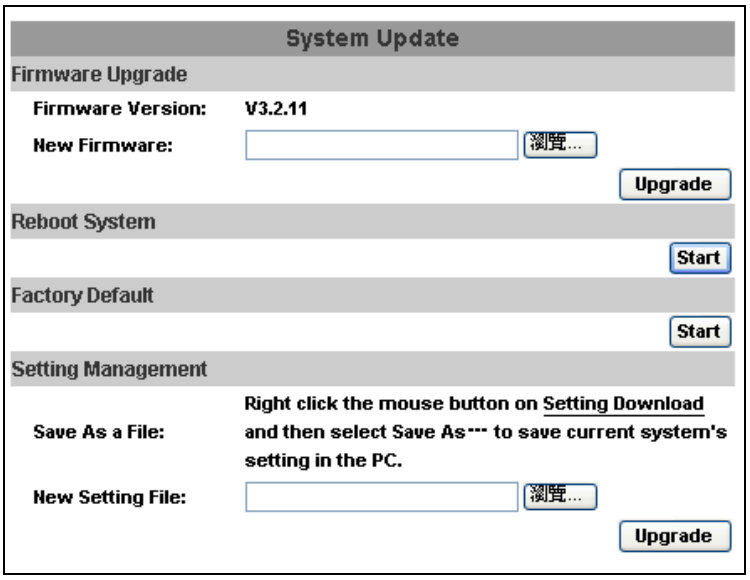
c. Add user

Type the user name and password, then click “Add/Set”. The guest user can only browse live video page and is not allowed to enter the configuration page.

d. Click “edit” or “delete” in the user list to modify them. The system will ask you to key-in the password in the pop-up window before you edit the user information.



III. System update



a. To update the firmware online, click “Browse…” to select the firmware. Then click “Upgrade” to proceed.

b. Reboot system: re-start the IP camera

c. Factory default: delete all the settings in this IP camera.

d. Setting Management: The user may download the current settings

to PC, or upgrade from previous saved settings.

1. Settings download:

   Right-click the mouse button on Setting Download → Select "Save AS…" to save current IP Camera settings in PC → Select saving directory → Save

2. Upgrade from previous settings

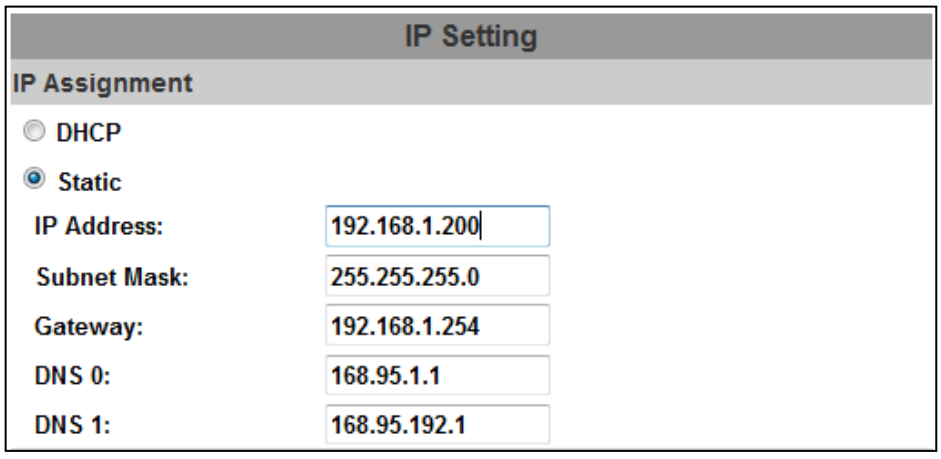
   Browse → search previous settings → open → upgrade → Settings update confirm → click **index.html**. for returning to main page

B. Network

I. IP Settings

IP Assignment

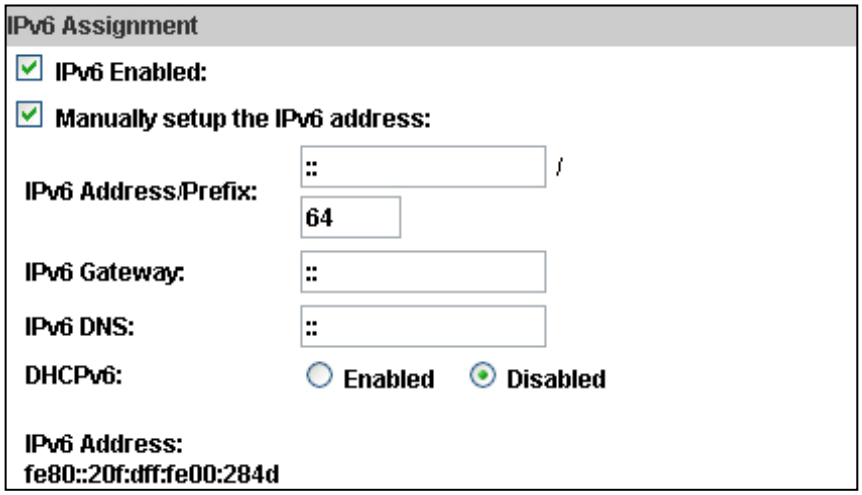
The IP Camera supports DHCP and static IP.



a. DHCP: The IP Camera will get all the network parameters automatically.

b. Static IP: Type-in the IP address subnet mask, gateway, and DNS manually.

IPv6 Assignment



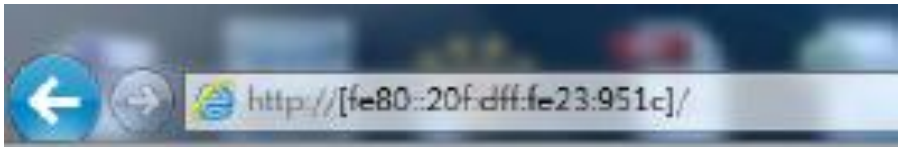
You can manually key-in the IPv6 address, enable DHCPv6, and use the automatically generated IPv6 address simultaneously.

- Manually setup the IPv6 address: Key in Address, Gateway, and DNS.

- DHCPv6: If you have a DHCPv6 server, enable it to assign the IPv6 automatically. The assigned IP address will be displayed beside the column.

- Automatically generated IPv6 Address: Indicates a virtual IPv6 address generated automatically by the IP camera. This virtual IPv6 address cannot be used on WAN.

To use IPv6 address to access the IP camera, open the web browser, and key-in the [IPv6 address] in the address bar. The [ ] parentheses mark is necessary.

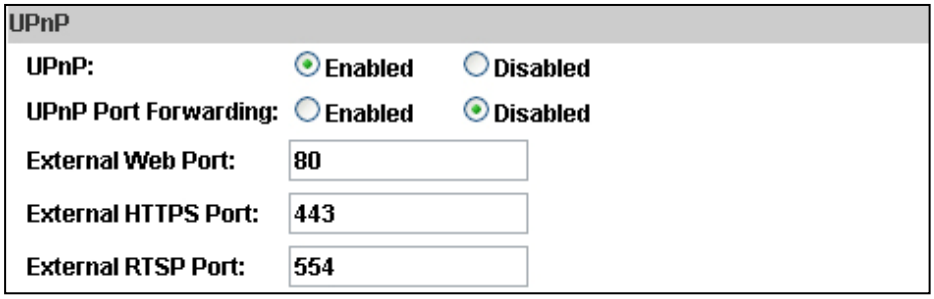


a. Port Assignment: The user may need to assign a different port to avoid conflicts when setting up the IP.

b. Web Page Port: set up the web page connecting port and video transmitting port (Default: 80)

c. HTTPs Port: set up the https port(Default: 443)

UPnP



This IP camera supports UPnP, if this service is enabled on your computer, the camera will automatically be detected and a new icon will be added to “My Network Places.”

UPnP Port Forwarding：Enable UPnP Port Forwarding for

accessing the IP Camera from the Internet; this option allows the IP Camera to open ports on the router automatically so that video streams can be sent out from a LAN. There are three external ports for being set: **Web Port**, **Http Port** and **RTSP port**. To utilize of this feature, make sure that your router supports UPnP and is activated.

Note: *UPnP must be enabled on your computer.*

Please follow the procedure to activate UPnP:

<Approach 1>

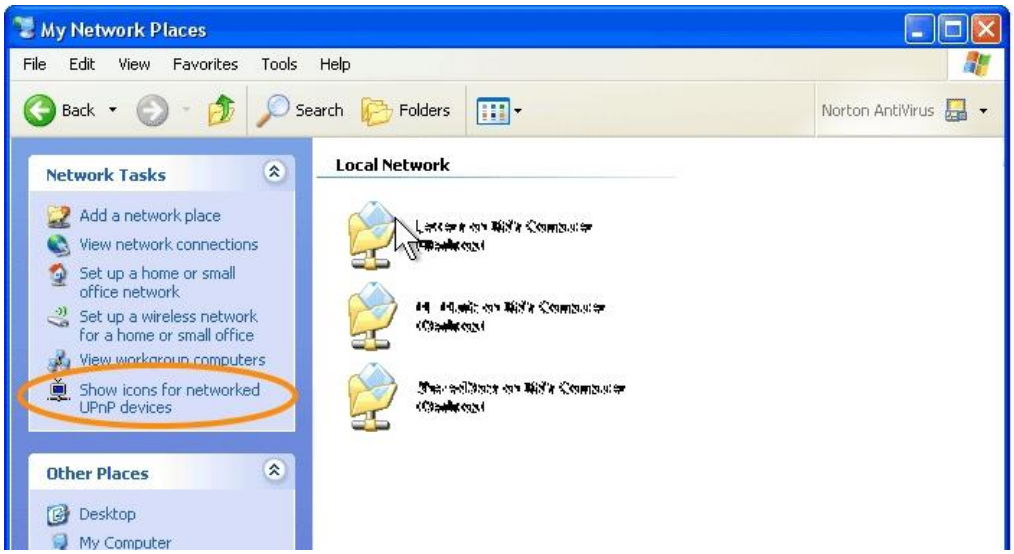
1. open the **Control Panel** from the **Start Menu**
2. Select **Add/Remove Program**s
3. Select **Add/Remove Windows Components** and open **Networking Services** section
4. Click **Details** and select **UPnP** to setup the service
5. The IP device icon will be added to “My Network Places”
6. The user can double click the IP device icon to access IE browser

<Approach 2>

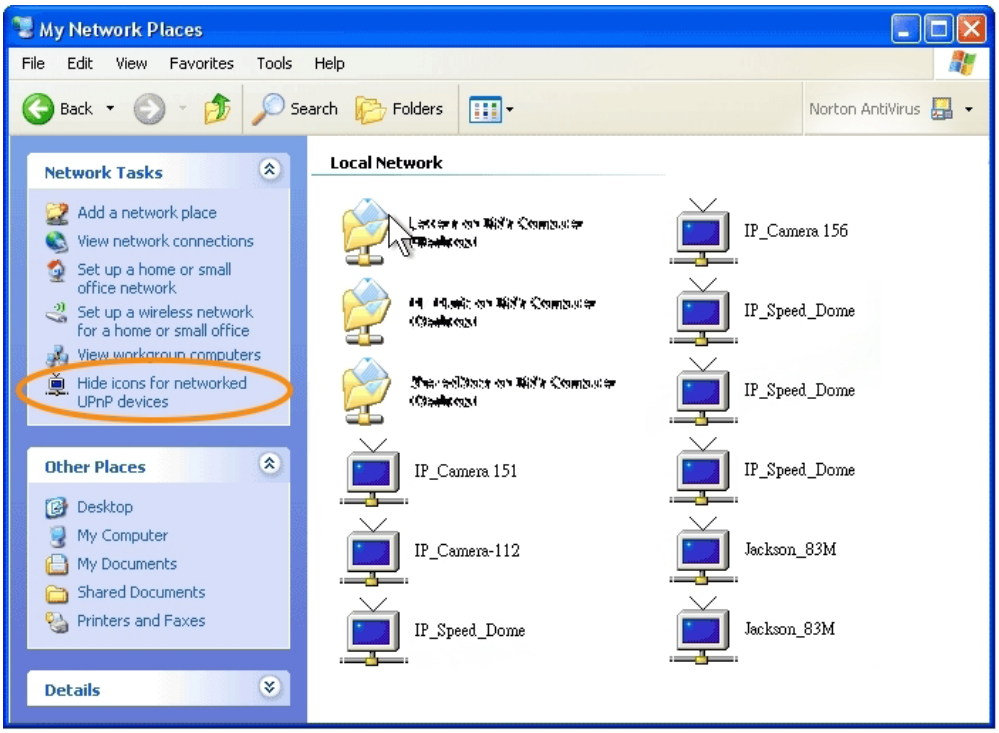
1. Open "My Network Space"
2. Click "Show icons for networked UPnP devices" in the tasks

column on the left of the page.

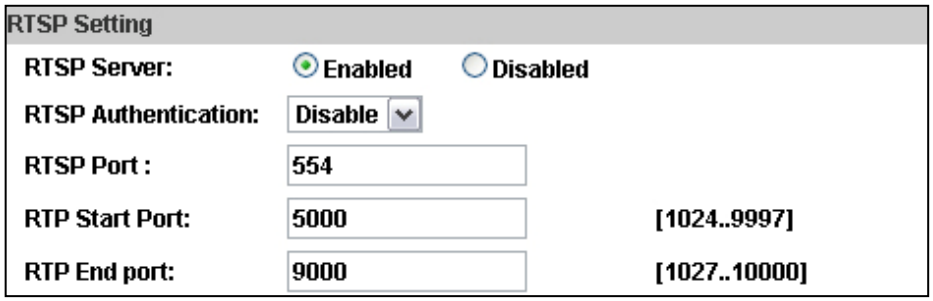
3. Windows might ask your confirmation for enabling the components. Click "Yes".



4. Now the IP device is displayed under the LAN. Double-click the icon to access the camera via web browser. To disable the UPnP, click "Hide icons for networked UPnP devises" in the tasks column.



RTSP setting



If you have a media player that supports RTSP protocol, you can use it to receive the video streaming from the IP camera. The RTSP address can be set for two streamings respectively.

1. RTSP Server: enable or disable

When the state is "Disable" everyone who knows your camera IP Address can link to your camera via RTSP. No username and password are required.

Under "Basic" and "Digest" authentication mode, the camera asks the user to key-in a username and password before allowing access.

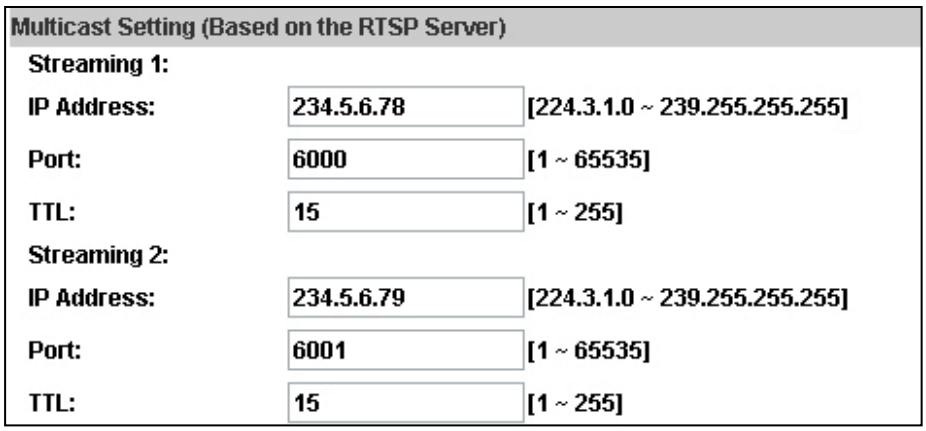
The password is transmitted as a clear text under basic mode, which provides a lower level of security than under “digest” mode.

Make sure your media player supports the authentication schemes.

2. RTSP Port: set up port for RTSP transmitting (Default: 554)

3. RTP Start and End Port: in RTSP mode, you can use TCP and UDP for connecting. The TCP connection uses the RTSP Port (554). The UDP connection uses the RTP Start and End Port.

Multicast Setting (Based on the RTSP Server)

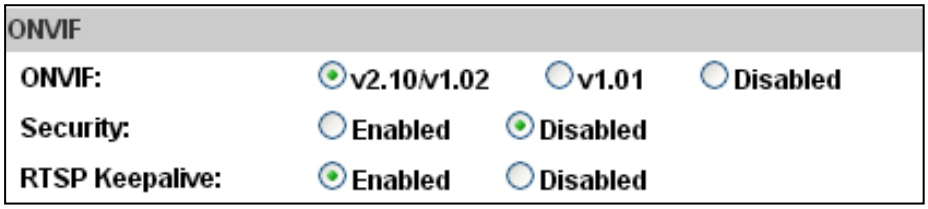

Multicast Setting (Based on the RTSP Server)
Streaming 1:
IP Address: 234.5.6.78 [224.3.1.0 ~ 239.255.255.255]
Port: 6000 [1 ~ 65535]
TTL: 15 [1 ~ 255]
Streaming 2:
IP Address: 234.5.6.79 [224.3.1.0 ~ 239.255.255.255]
Port: 6001 [1 ~ 65535]
TTL: 15 [1 ~ 255]

Multicast is a bandwidth conservation technology. This function allows several users to share the same packet sent from the IP camera.

For using Multicast, appoint here an IP Address and port. TTL means the life time of packet, the larger the value is, the more users can receive the packet.

For using Multicast, be sure to enable the function "Force Multicast RTP via RTSP" in your media player. Then key in the RTSP path of your camera: "rtsp :///(IP address)/" to receive the multicast.

ONVIF



1. Choose your ONVIF version and settings.

Under ONVIF connection, the video will be transmitted by RTSP. Be sure to enable the RTSP server in “IP setting”, otherwise the IP Camera will not be able to receive video via ONVIF.

2. Security

   By selecting "Disable", the username and password are not required for accessing the camera via ONVIF. By selecting "Enable" the username and password are necessary.

3. RTSP Keepalive:

   When the function is enabled, the camera checks once in a while if the user who is connected to the camera via ONVIF is still connected. If the connection has been broken, the camera will stop transmitting video to the user.

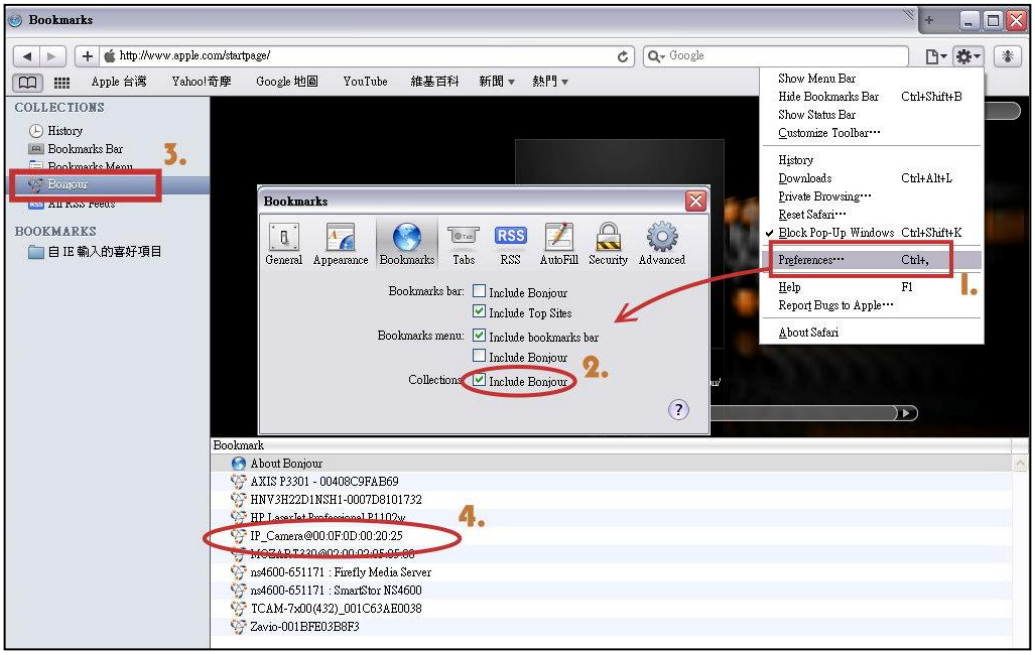
Bonjour

This function allows Apple systems to connect to this IP camera. On “Bonjour Name” Key-in the name here.

The web browser "Safari" has also a Bonjour function. Tick "Include Bonjour" in the bookmark settings, for the IP camera to appear under the bonjour category. Click the icon to connect to the

IP camera.

The Bonjour function on Safari browser doesn't support HTTPS protocol. If on the camera you select "https", the camera will appear on Safari's bookmarks but it cannot be accessed.

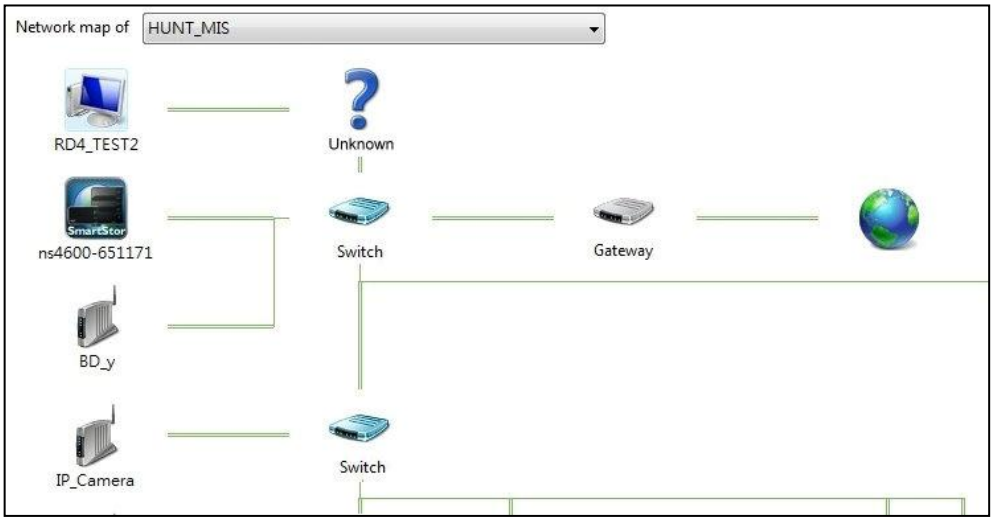


LLTD

If your PC supports LLTD, enable this function for allowing checking the connection status, properties, and device location (IP address) in the network map.

If the computer is running Windows Vista or Windows 7, you can find LLTD through the path:

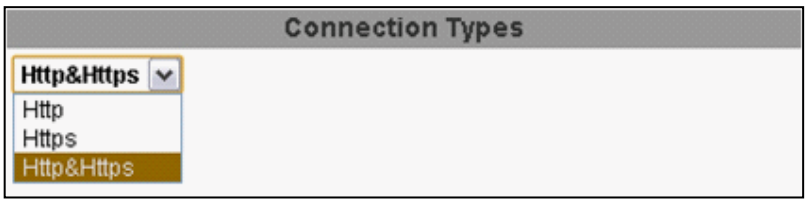
Control Panel → Network and Internet → Network and Sharing Center → Click "See full map".



II. Advanced:

a. Https (Hypertext Transfer Protocol Secure)

When the users access the camera via Https protocol, the transmitted information will be encrypted.



You can select the connection type.

• Http: the user can access the camera via the Http path but cannot access it via the Https path.

• Https: the user can access the camera via the Https path but

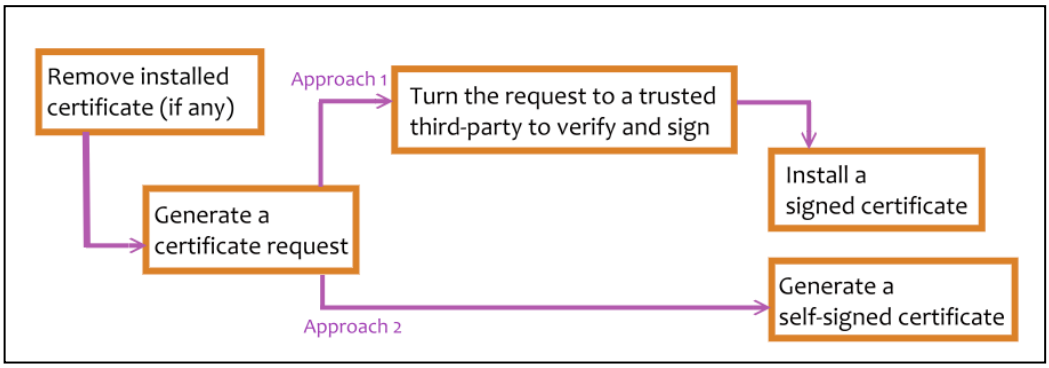
cannot access it via the Http path.

• Http & Https: Both the Http and Https path can be used to access the camera. When you change the connection type settings, it may cause **connection error** or **disconnection error** if you switch the protocol directly. Therefore, the **Http & Https** mode is necessary.

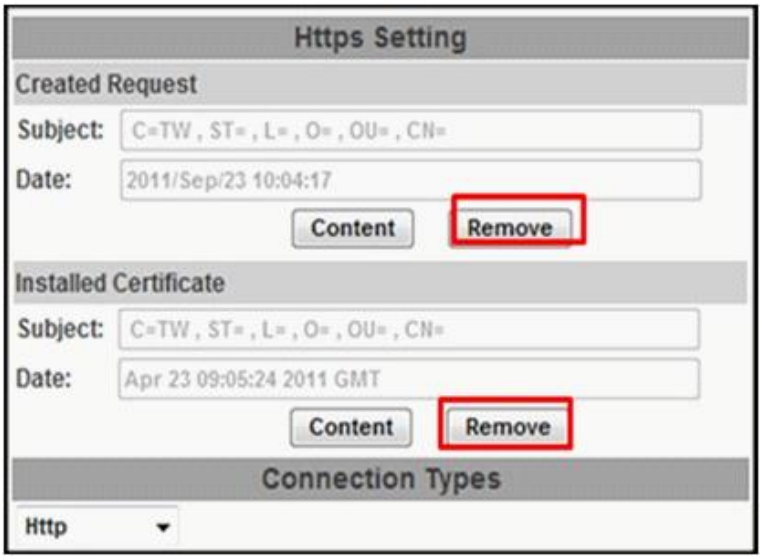
If you want to change from Http to Https, please switch to “Http & Https” mode first, and then switch to “Https” mode and vice versa.

The Https protocol has a certificate verifying mechanism. When the user access a website via Https, the browser will check the certificate of that domain and verify its trustiness and secure.

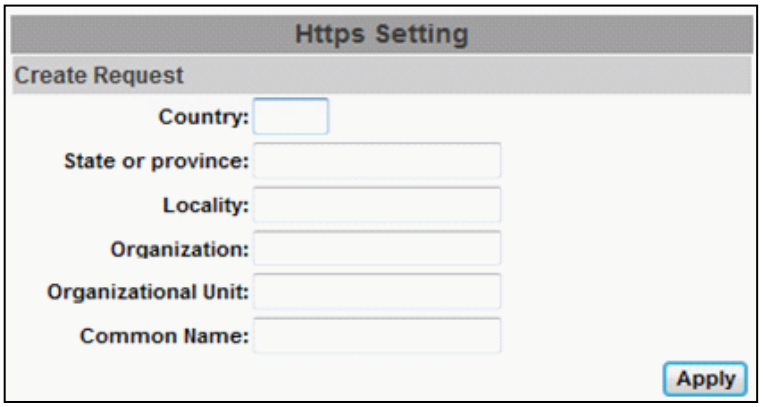
Certificate generation process:


Remove installed certificate (if any)
Approach 1
Turn the request to a trusted third-party to verify and sign
Install a signed certificate
Generate a certificate request
Generate a self-signed certificate
Approach 2

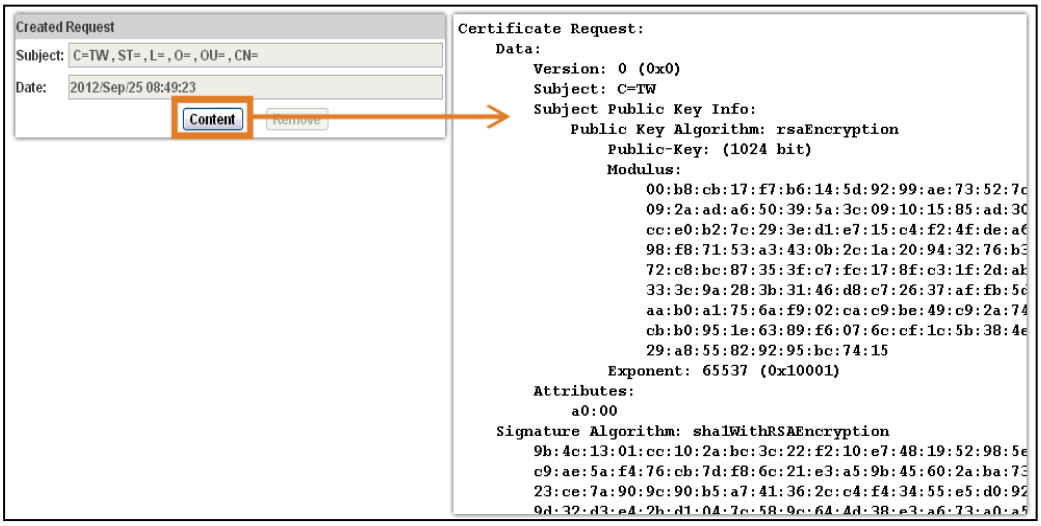
• Remove the existing certificate: Before you generate a new certificate, please remove the installed one. Select "Http" connection type and click "Remove". If a dialog box pops up to ask you to confirm, click “Yes”.



• Created Request: Fill-in the following form and click “apply”.



• After generating a certificate request, if you choose to turn it and verify by a trusted third-party, click “Content” and copy all the request content.

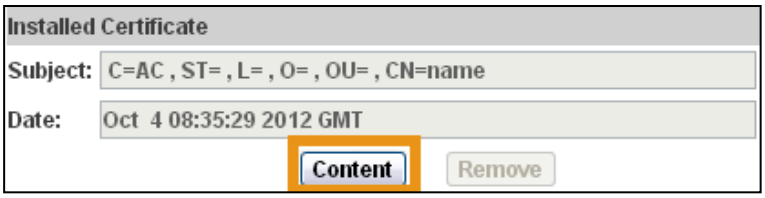


• According to the certificate source, there are two ways to install the certificate:

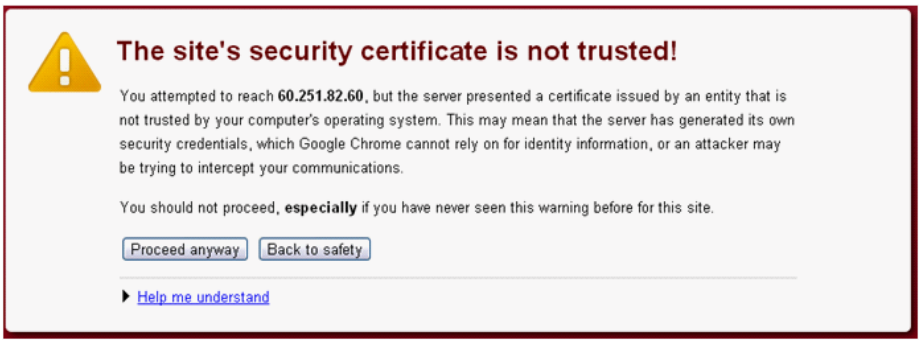
If you had sent the certificate request for signing and receiving a signed certificate, click ” browse” and find the certificate file in your computer. Click “Apply” to install it.

If you choose to generate a self-signed certificate, fill-in the following forms and set the validity day, click “Apply” to finish and install it.

After finishing the installation, you can click “Content” to check the certificate content.



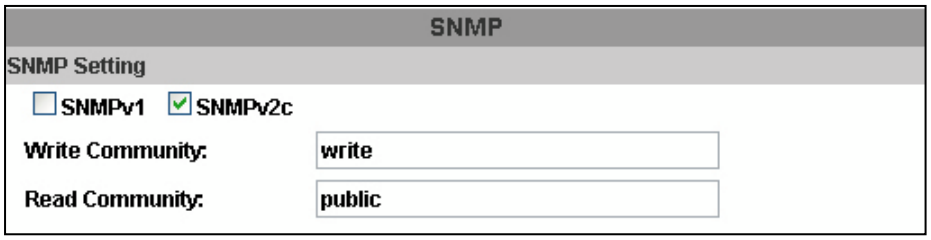
• To use Https to access the camera, open your browser, and key-in "https:// (IP address)/" in the address bar. Now your data will be transmitted via encrypted communications. The browser will check your certificate status. It might show the following warning message:


The site's security certificate is not trusted!
You attempted to reach 60.251.82.60, but the server presented a certificate issued by an entity that is not trusted by your computer's operating system. This may mean that the server has generated its own security credentials, which Google Chrome cannot rely on for identity information, or an attacker may be trying to intercept your communications.
You should not proceed, especially if you have never seen this warning before for this site.
Proceed anyway
Back to safety
Help me understand

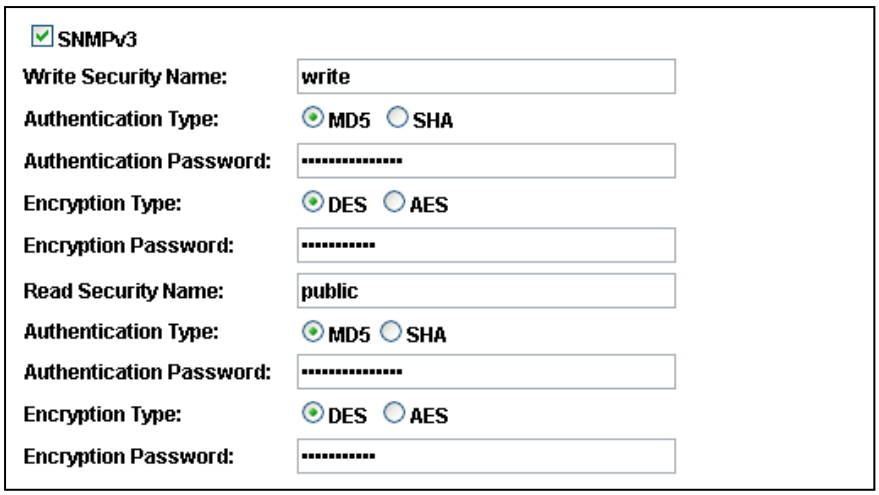
Meaning that the certificate is self-signed or signed by a distrusted institution. Click “Proceed anyway” for continuing to the camera page.

b. SNMP (Simple Network Management Protocol)

1. Enable SNMPv1 or SNMPv2 and write the name of both **Write Community** and **Read Community**.



2. Enable SNMPv3. Set Security Name, Authentication Type, Authentication Password, Encryption Type, Encryption Password of Write mode and Read mode.



3. Enable SNMPv1/SNMPv2 Trap for detecting the Trap server.

   Please set what event needs to be detected.

- Cold Start: The camera starts up or reboots.

- Setting changed: The SNMP settings has been changed.

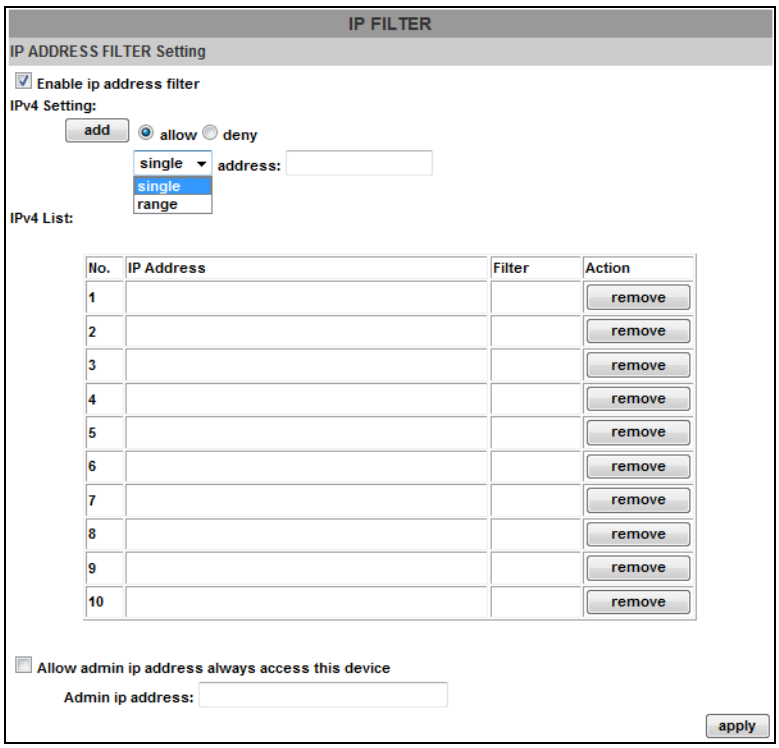
- Network Disconnected: The network connection has broke down. (The camera will send trap messages after the network is connected again)

- V3 Authentication Failed: A SNMPv3 user account tries to get authentication but failed. (Due to incorrect password or community)

- SD Insert / Remove: A Micro SD card is inserted or removed.

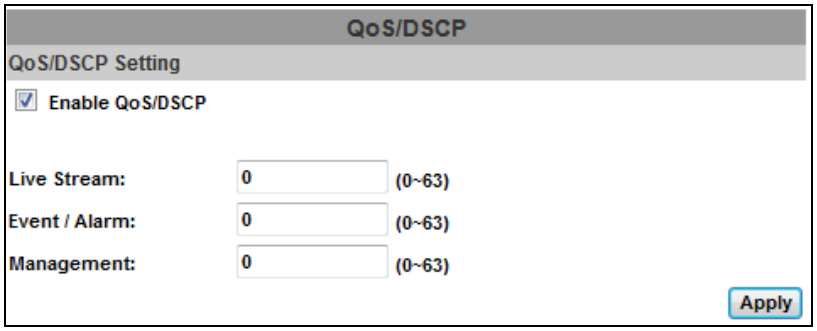
c. Access list:

”Enable IP address filter” for setting the IP addresses which allows or denies this camera. There are two options, single and range.

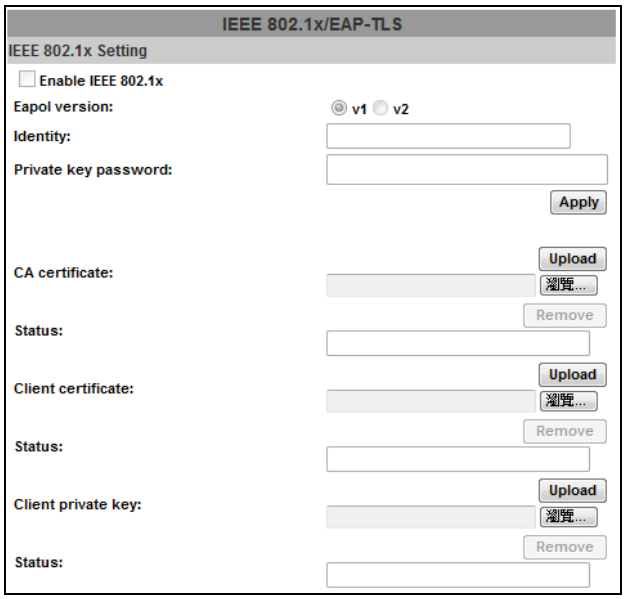


d. QoS/DSCP(Quality of Server/Differentiated Services Code-point):

DSCP specifies a simple mechanism for classifying and managing network traffic and provide QoS on IP networks. DSCP is a 6-bit in the IP header for packet classification purpose. Please define it for **Live Stream**, **Event / Alarm** and **Management.**

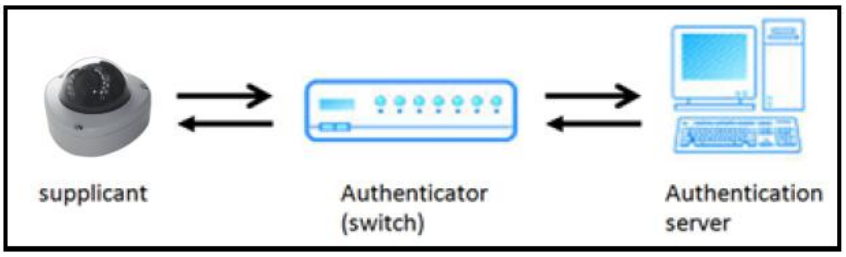


e. IEEE 802.1x:



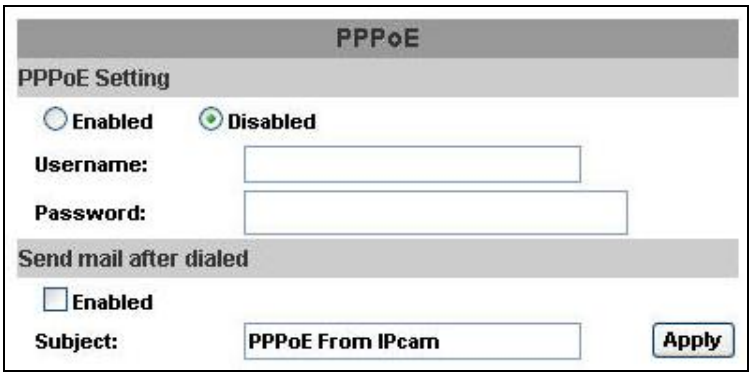
IEEE 802.1x is an IEEE standard for port-based Network Access Control. It provides an authentication mechanism to a device on a LAN or WLAN.

The EAPOL protocol supports service identification and optional point to point encryption over the local LAN segment.



Please check what version of the authenticator and authentication server is supported. This camera supports the EAP-TLS method. Please enter the ID, password issued by the CA, then upload the related certificates.

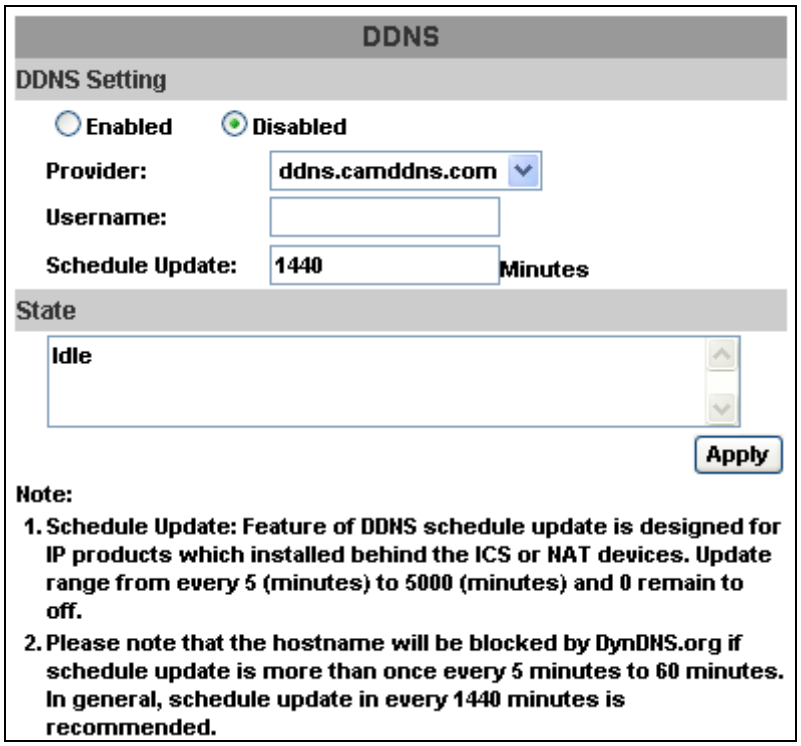
III. PPPoE & DDNS:



a. **PPPoE:** Select “Enabled” to use PPPoE. Key-in the username and password for ADSL connection.

Send mail after dialed: When connected to the internet, the IP Camera will send a mail to a specific mail account. For mail settings, please refer to “Mail and FTP” settings.

b. **DDNS:**


DDNS
DDNS Setting
Enabled
Disabled
Provider:
ddns.camddns.com
Username:
Schedule Update:
1440
Minutes
State
Idle
Apply
Note:
1. Schedule Update: Feature of DDNS schedule update is designed for IP products which installed behind the ICS or NAT devices. Update range from every 5 (minutes) to 5000 (minutes) and 0 remain to off.
2. Please note that the hostname will be blocked by DynDNS.org if schedule update is more than once every 5 minutes to 60 minutes. In general, schedule update in every 1440 minutes is recommended.

For Camddns service, please follow the steps:

1. Enable this service
2. Key-in the username.
3. IP schedule update default: 5 minutes
4. Click “Apply”.

1. DDNS Status

(1) Updating: Information update

(2) Idle: Stop service.

(3) DDNS registration successful, can now log by http://<username>.ddns.camddns.com: Register successfully.

(4) Update Failed, the name is already registered: The user name has already been used. Please change it.

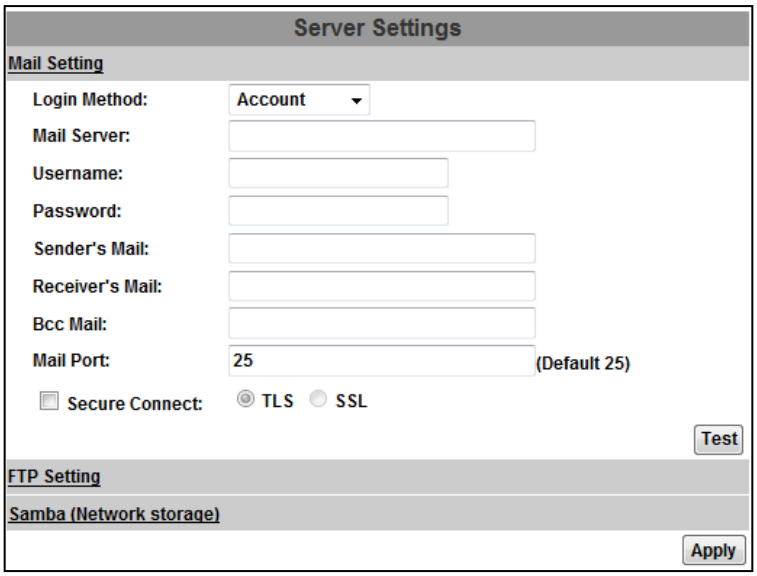
(5) Update Failed; please check your internet connection: Network connection failed.

(6) Update Failed, please check the account information you provided: The server, user name, and password may be wrong.

IV. Server settings

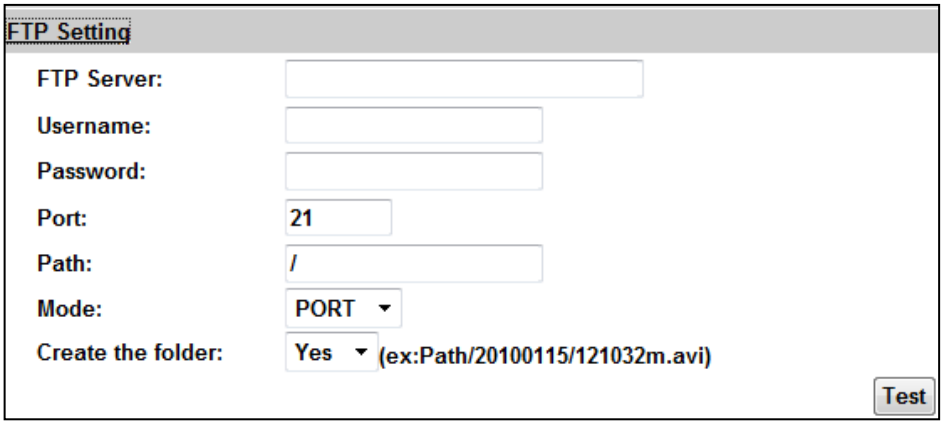
There are three choices of server types available: **Email**, **FTP** and **SAMBA**. Select the item for display the detailed configuration options. You can configure either one or all of them.

To send out the video via mail of FTP, please set up the configuration first.



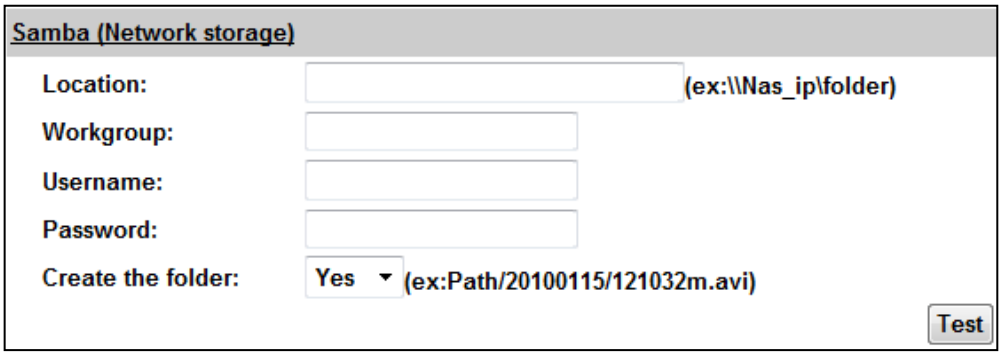
FTP

To send out video via mail of FTP, please set up the configuration.



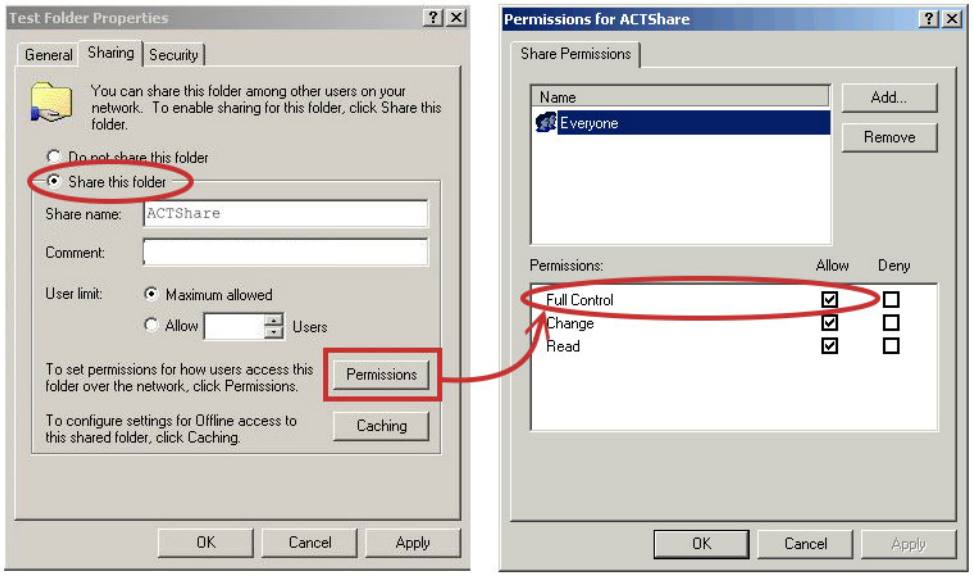
Samba

Select this option to send media files via a neighbor network when an event is triggered.



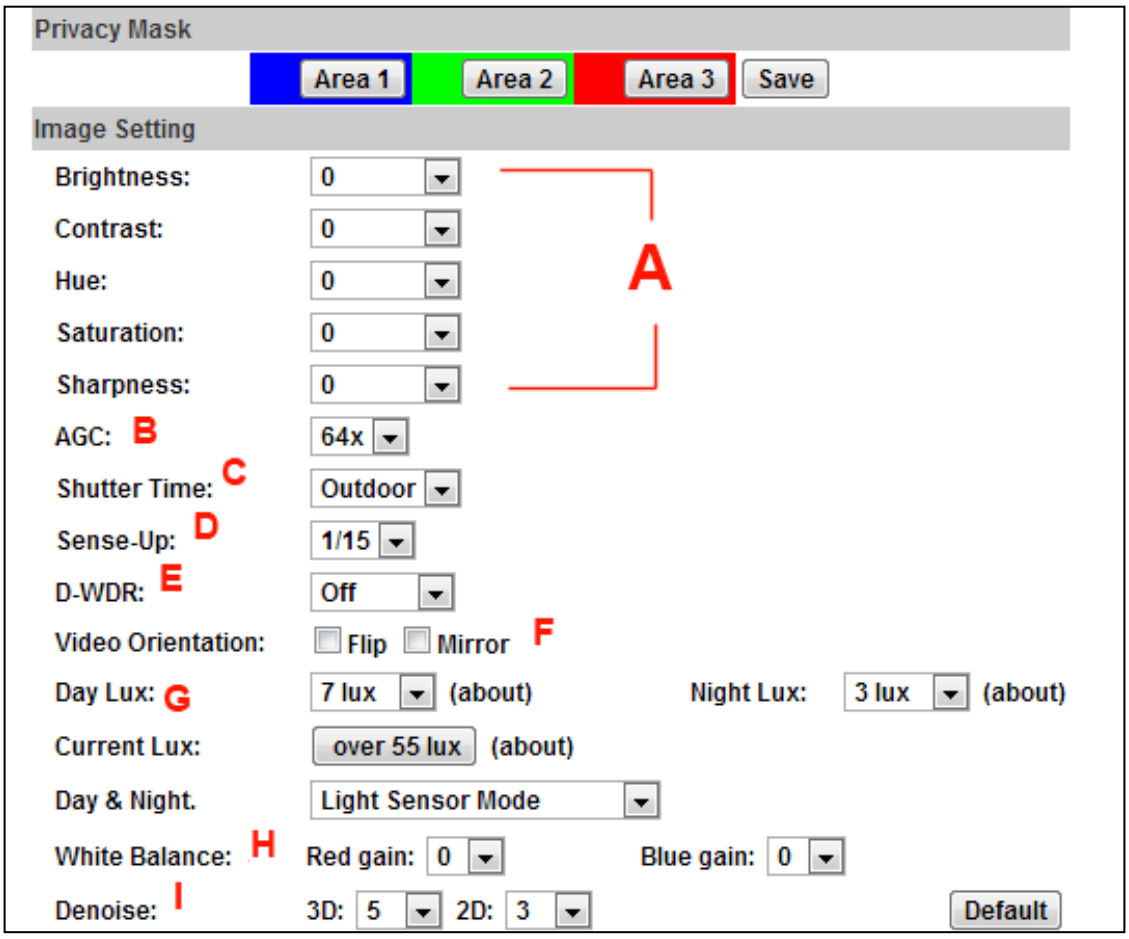
Click “Apply” to save the settings, then use “Test” button to test the server connection. A message box will tell you “OK!” if it works, and a test document will be created in the location.

If the test failed, check the sharing setting of your location folder. The folder properties must be “shared” and the permissions must be “Full Control” just as the picture below.


Test Folder Properties
General
Sharing
Security
You can share this folder among other users on your network. To enable sharing for this folder, click Share this folder.
Do not share this folder
Share this folder
Share name:
ACTShare
Comment:
User limit:
Maximum allowed
Allow
Users
To set permissions for how users access this folder over the network, click Permissions.
Permissions
To configure settings for Offline access to this shared folder, click Caching.
Caching
OK
Cancel
Apply
Permissions for ACTShare
Share Permissions
Name
Everyone
Add...
Remove
Permissions:
Allow
Deny
Full Control
Change
Read
OK
Cancel
Apply

C. A/V Setting

1. Image Setting



For security and privacy purposes, there are three areas that can be set up for privacy. Click the Area button first, then drag an area on the above image. Remember to save your settings. The masked area will not be shown on both live view and recording image.

Please refer to the details below for image settings:

a. Brightness, Contrast, Hue, Saturation, Sharpness can be adjusted here.

b. AGC: The sensitivity of the camera can be adjusted to the environmental lighting. Enable this function for getting brighter image on low light, but the level of noise may also increase.

c. Shutter Time: Choose the location of your camera or fixed shutter time. The shorter the shutter time is the less light the camera receives, making the image darker.

d. Sense-Up: This function increases the sensitivity of the camera for getting a brighter image at night. The smaller the value you select, the slower the shutter speed becomes, making the images brighter. The moving objects might be blurred.

e. D-WDR: This function enables the camera to reduce the contrast in dark zones resulting from over and under exposure.

If the D-WDR is enabled. The values for bright, dark and contrast can be adjusted.

f. Video Orientation: Flip or mirror the image.

g. Day & Night: The camera can detect the light level of the environment. If you choose "Light Sensor Mode", the image will be turned black and white at night in order to keep a clear image. To set light sensor mode, appoint a lux standard of switching D/N. Current lux value is provided for reference. Under "Times Mode" the switch time of Color / Black and white will be according to the given time. You can also control it by choosing "Color" or "B/W".

h. White Balance: Adjust red / blue gain

i. Denoise: This function is able to filter the noise and blur from the image and show a clearer view.

3D denoise analyzes successive pictures to detect the noise places while.

2D denoise analyzes only single picture.

Note: When you select a number in "Shutter Time", actually the shutter time varies in a range and controlled by camera automatically. The following table shows the shutter time option and corresponding range

Option	Shutter Time Range (sec.)
Outdoor	1/10000 ~ Selected number in "Sense-up"
Indoor	NTSC: 1/120 ~ Selected number in "Sense-up" PAL: 1/100 ~ Selected number in "Sense-up"
1/30	1/10000 ~ 1/30
1/50	1/10000 ~ 1/50
1/60	1/10000 ~ 1/60
1/100	1/10000 ~ 1/100
1/125	1/10000 ~ 1/125
1/250	1/10000 ~ 1/250
1/500	1/10000 ~ 1/500
1/1000	1/10000 ~ 1/1000
1/10000	1/10000
* Sense-up options: 1/30, 1/15, 1/10, 1/5	

2. Video Setting

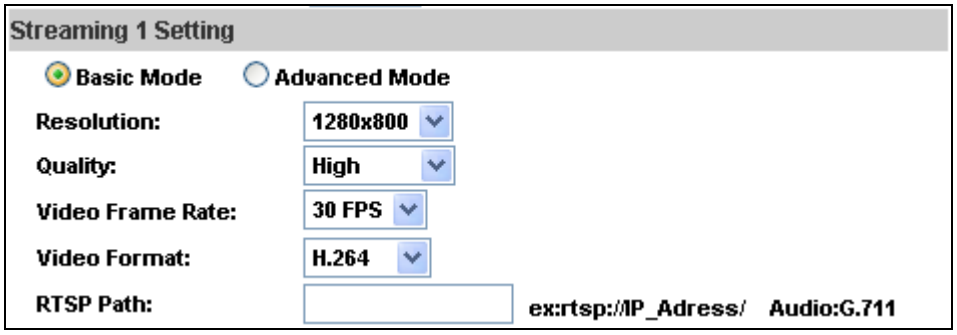
The user can select the camera system type

Streaming 1 Setting: Basic mode and Advanced mode

Streaming 2 Setting: Basic mode, Advanced mode, and 3GPP mode

(Max Video Frame Rate for both streaming combined is 30 FPS)

a. Streaming 1& 2 Basic Mode:



1. Resolution:

   Stream 1
   2592x1944@15fps, 2048x1536@15fps, 1920x1080@30fps, 1280x720@30fps, 640x480@30fps, 320x240@30fps, 176x144@30fps

   Stream 2
   640x480@30fps, 320x240@30fps, 176x144@30fps

2. Profile:

   Profiles are different compressions of H.264. High profile provides better coding efficiency. Note that some devices do not support every profile. For example, iPhone4 only supports Main profile.

3. Quality:

   There are 5 levels:

Best/ High/ Standard/ Medium/ Low

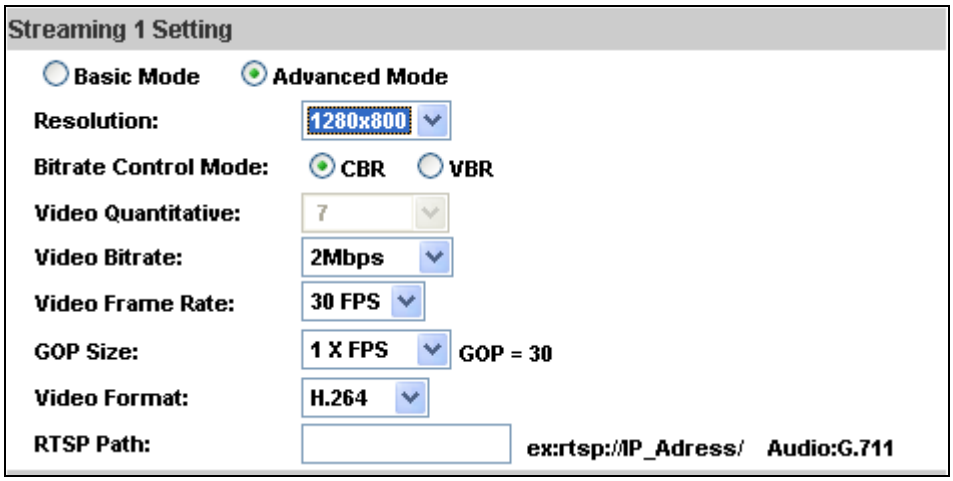
The higher the quality is, the bigger the file size is. Not good for internet transmission.

4. Video Frame Rate: The video refreshing rate per second.

5. Video Format: **H.264**, **MPEG4** or **M-JPEG**

6. RTSP Path: RTSP output name

b. Streaming 1 & 2 Advanced Mode:



1. Resolution:

Stream 1
2592x1944@15fps, 2048x1536@15fps, 1920x1080@30fps, 1280x720@30fps, 640x480@30fps, 320x240@30fps, 176x144@30fps

Stream 2
640x480@30fps, 320x240@30fps, 176x144@30fps

2. Profile:

   High profile provides better coding efficiency. Note that some devices do not support every profile. For example, iPhone4 only sup- ports Main profile.

3. Bitrate Control Mode

   There are CBR〔Constant Bit Rate〕 and VBR〔Variable Bit Rate〕

   CBR: **32Kbps~8Mbps** (the higher the CBR is, the better the video quality is)

   VBR: **1(Low) ~10(High)** – Compression rate, the higher the compression rate, the lower the picture quality is; vise versa. The balance between VBR and network bandwidth will affect picture quality. Select the VBR rate to avoid picture breaking up or lagging.

4. Video Frame Rate
   The video refreshing rate per second.

5. GOP Size
   It means "Group of Pictures". The higher the GOP is, the better the quality is.

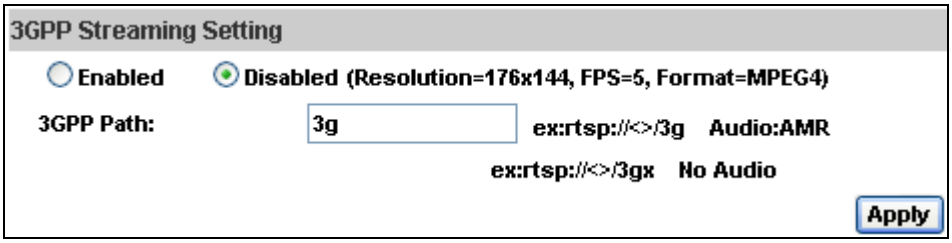
6. Video Format: **H.264** or **JPEG**

7. RTSP Path: RTSP output connecting path

c. 3GPP Streaming mode:

   The RTSP here is separated from the RTSP settings in the "IP SETTING".

3GPP Streaming can still work even if you select "disabled" in the RTSP server option of IP Setting.



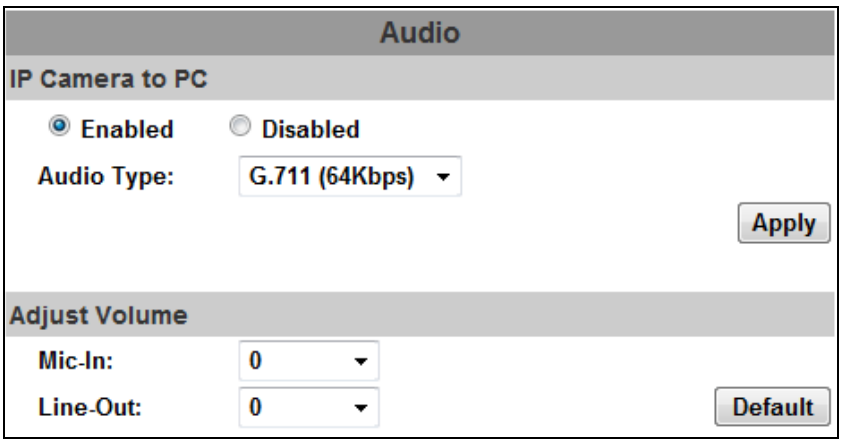
1. Enable or Disable 3GPP Streaming

2. 3GPP Path: 3GPP output connecting path. If the IP address of your camera is 192.168.40.150, and you key-in "3g" in the column, the 3GPP path will be rtsp://192.168.40.150/3g.

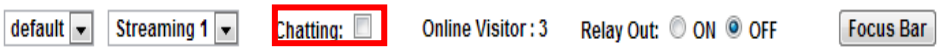
3. Audio

The IP CAMERA supports 2-way audio. The user can send audio from the IP Camera built-in mic to the remote PC; the user can also send audio from remote PC to IP Camera's external speaker.

a. Audio from IP camera built-in mic to local PC: select "Enable" to start this function and also can select the audio type.



b. Audio from local PC to IP Camera: Check “chatting” in the browsing page.

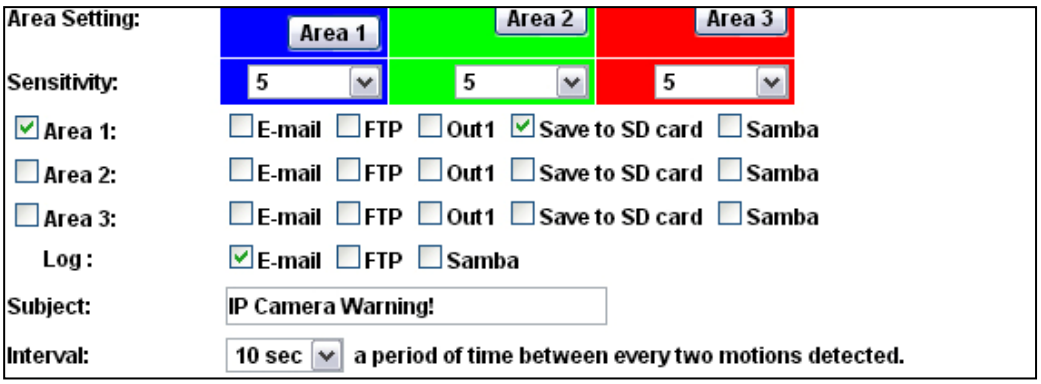


D. Event List

The IP Cam provides multiple event settings.

1. Event Setting

a. Motion Detection



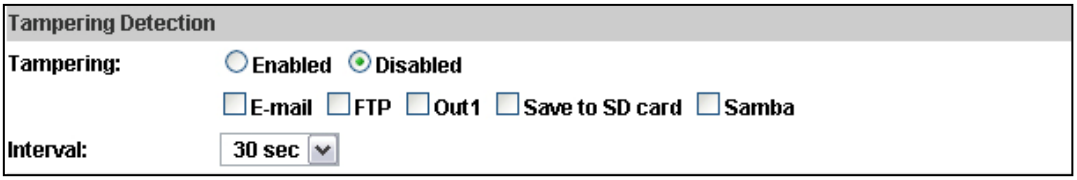
To enable motion detection, please tick "Area 1/2/3". Click "Area 1/2/3" in “Area Setting”, and draw an area on the preview screen. When motion is detected in the area, the word "Motion!" will be displayed on the live screen. The camera will send video or snapshot to specific mail addresses, trigger the output device, or save video to FTP/ Micro SD card/ Samba.

By selecting "save to SD card", the video or snapshot will be saved to Micro SD card. Also, by ticking “E-mail/ FTP/ Samba” on the "Log" option, the motion detection log will be sent to “E-mail/ FTP/ Samba” simultaneously.

• Interval: For example, selecting "10 sec". Once the motion is detected and action is triggered, it cannot be triggered again within 10 seconds.

• Based on the schedule: When the option box is ticked, only during the selected schedule time the motion detection is enabled.

b. Tampering Detection



When the camera view is covered, moved, hit by strong light, or out of focus, the tampering detection will be triggered, and send snapshot or video to mail/FTP/Samba/SD card, or trigger the external alarm. For example:

Before Tampering Detection

Tampering Triggered (Defocused)

Before Tampering Detection

Tampering Triggered (Lens Covered)

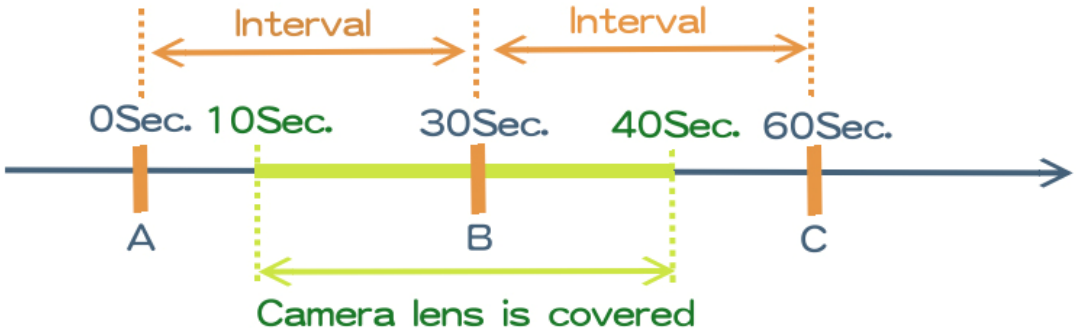
Before Tampering Detection

Tampering Triggered (Glare)

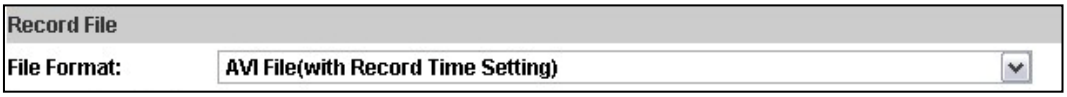
Before Tampering Detection

Tampering Triggered (Camera Moved)

• Interval: The tampering detecting interval. Take the diagram below as example. The interval is set for 30 second; the camera lens is covered during 10 - 40 sec. At time point B, the camera compares the view with time point A, and sends an alarm when it founds that the lens is covered. At time point C, the camera compares the view with time point B, and sends an alarm when it founds that the lens is uncovered.



c. Record File



When an event occurs, the IP camera will record a video clip or take snapshot, and then send to mail/ FTP/ Samba. Select the file format to be saved.

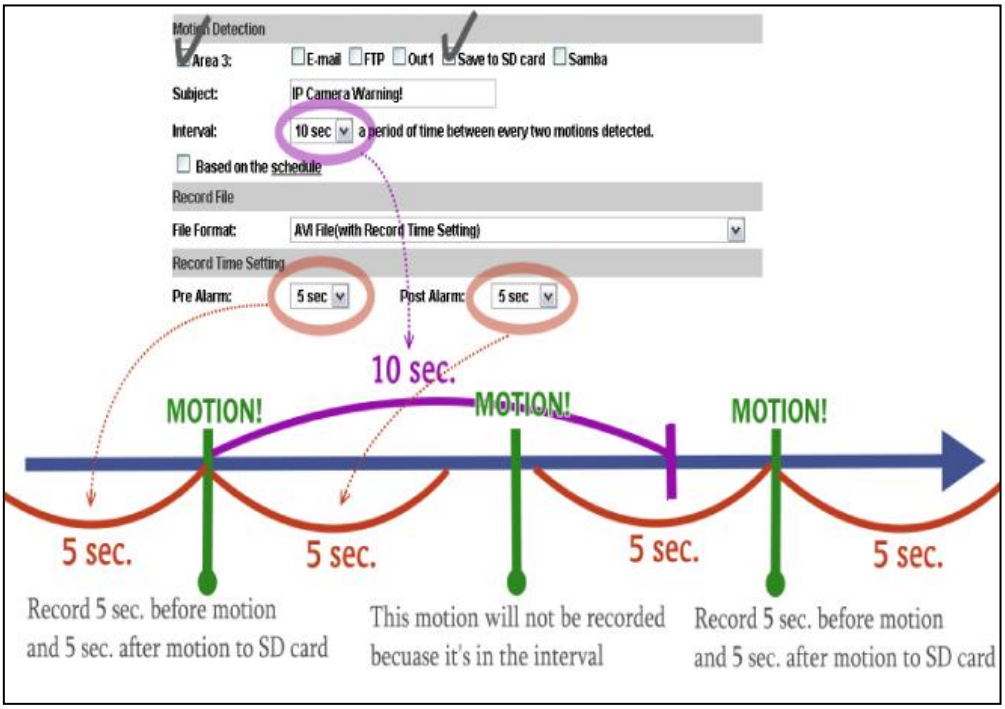
• AVI File (with Record Time Setting): Save AVI video file. The video length is according to the value set in Record Time Setting.

• JPEG Files (with Record Time Setting): Only when selecting "JPEG" in streaming 1 video format of Video Setting, this option can be enabled. Select this option to save several JPEG picture files. The successive picture files cover a period of time according to the value set in Record Time Setting.

• JPEG File (Single File with Interval Setting): Save a single JPEG picture file when an event occurs.

d. Record Time Setting

When an event occurs, the IP camera will record a video clip or take a snapshot, and then send it via mail/ FTP/ Samba. Select the video recording length before and after the event is detected.



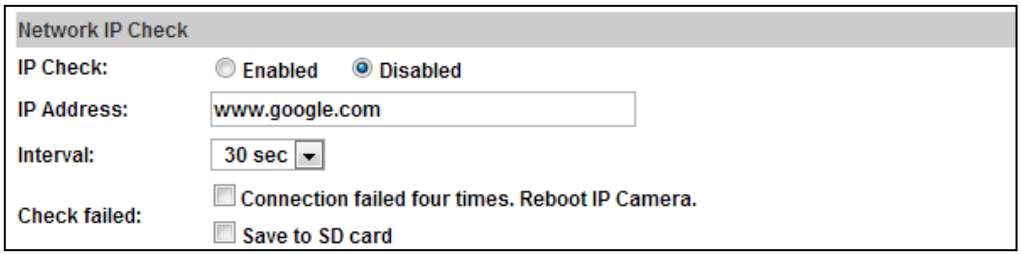
e. Network Dis-connected:

The IP Camera will scan the network. When set “Save to SD card” the image will be recorded into the SD card after the IP Camera detects a network dis-connected state.

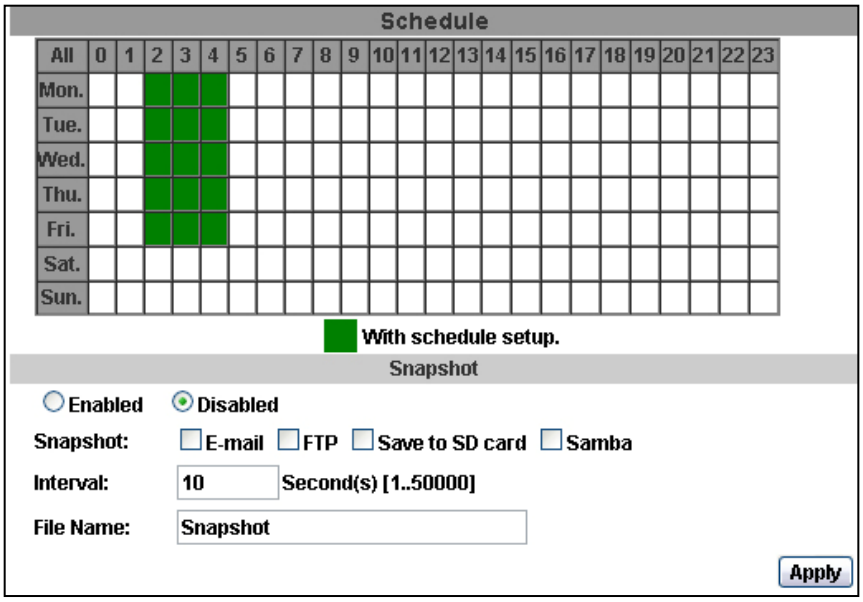
f. Network IP check:

After enabling “IP Check”, the IP camera will check if the network server is connected to the Internet. If the IP camera checking failed,

the image will be recorded into the SD card.



2. Schedule

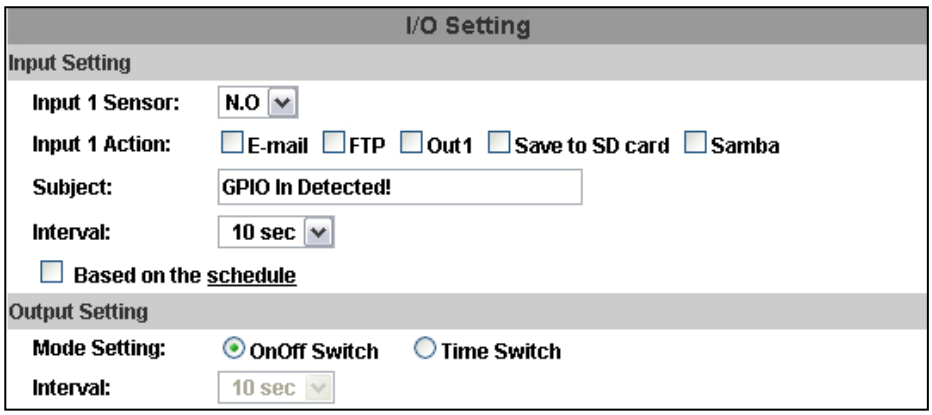


a. Schedule: After completing the schedule setup, the camera data will be recorded according to the schedule setup.

b. Snapshot: After enabling the snapshot function; the user can select the storage position of the snapshot file, the interval time and the reserved file name of it.

c. Interval: The interval between two snapshots.

3. I/O Setting



a. Input Setting:

The IP Cam supports input and output. When the input condition is triggered, it can trigger the relay; send the video to mail addresses /FTP server / SAMBA.

- Interval:

  For example, when selecting "10 sec", once the motion is detected the action is triggered; it cannot be triggered again within 10 seconds.

- Based on the schedule:

  When the option box is ticked, only during the selected schedule time the I/O is enabled. That is, for example, if the 11th hour of Monday has not been colored in the schedule table, then no action will be triggered even if the camera detects input signal during 11:00~12:00 on Monday.

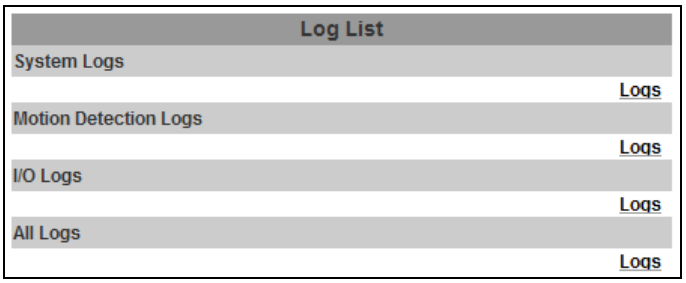
b. Output Setting:

The output mode affects the DO or relay out duration.

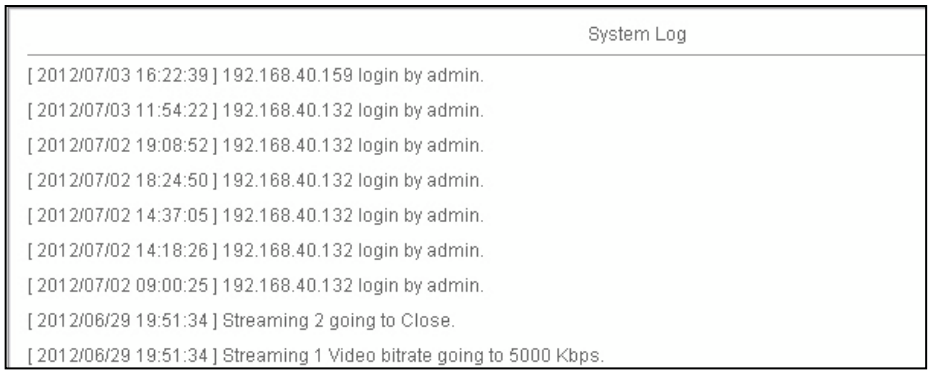
- ON/Off Switch: The camera triggers the external device and lasts for 10 seconds. You can turn off the alarm manually by clicking “off” at the right bottom of the live video page.

- Time Switch: The camera triggers the external device and lasts for certain time according to the internal setting, and the user is not allowed to break off the alarm manually.

4. Log List



Sort by System Logs, Motion Detection Logs and I/O Logs. In addition, System Logs and I/O Logs won’t lose data due to power failure.

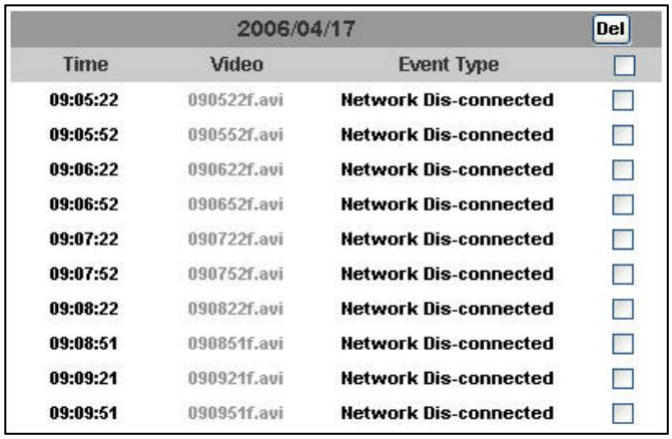


5. SD Card

a. Playback

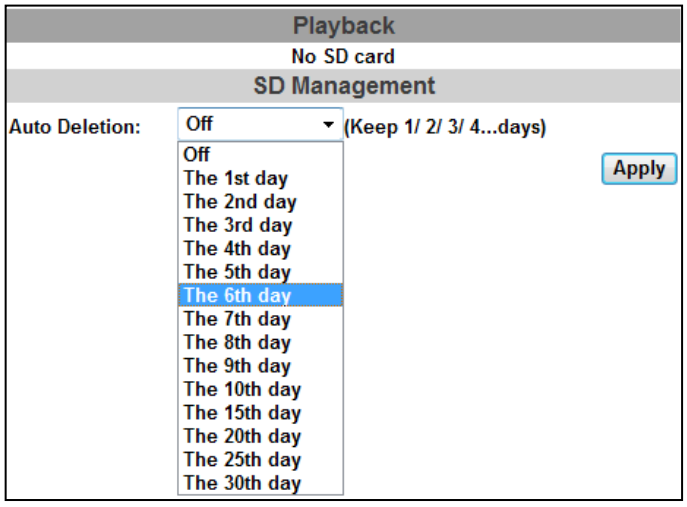
Please Insert the Micro SD card before use this function. Make sure to push completely the Micro SD card into the slot.

Click the date listed on this page for showing the video list. The video format is AVI. Click the video to start Microsoft Media Player to play it. To delete the video, check it, and then click "Del".



b. SD Management

When choosing “The 1st day” the recoding file will be kept for one day. The oldest file will be deleted if the Micro SD card is full.



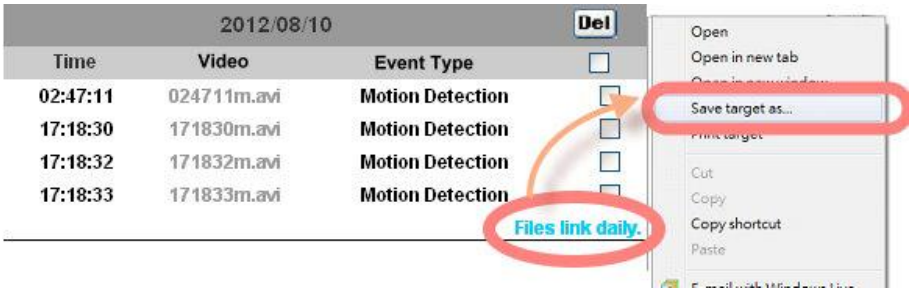
Note：The use of the SD card will slightly affect the operation of the IP Camera, such as affecting the frame rate of the video.

c. Copy to PC

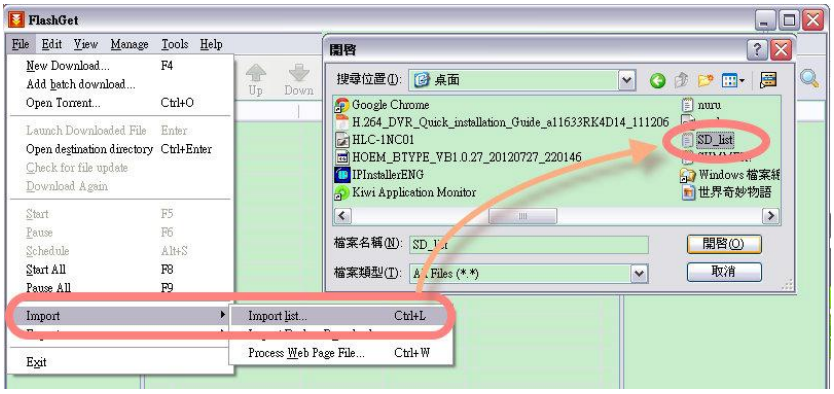
You can insert the Micro SD card to the PC and read the files directly, or use FlashGet instead to download the files from the IP camera. (In this way you do not need to pull out the Micro SD card from the camera.)

To use FlashGet for downloading image and video data from the Micro SD card, please follow the steps:

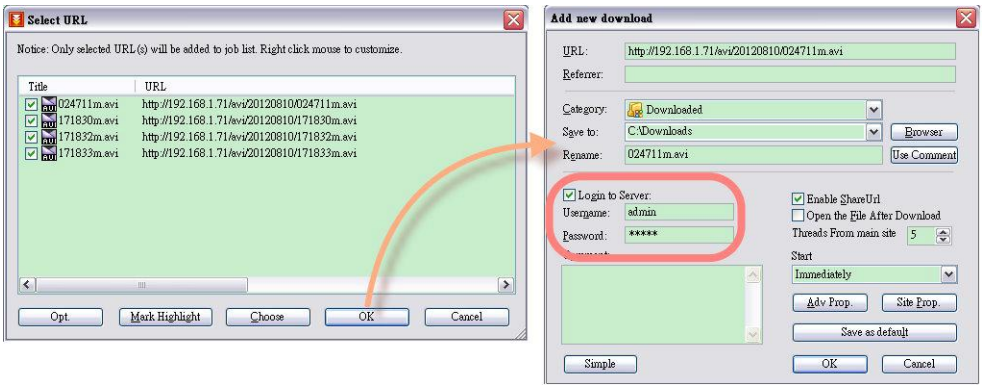
(i) Enter data list and right-click “Files link daily”, select “save target as…” then save the link list to PC.



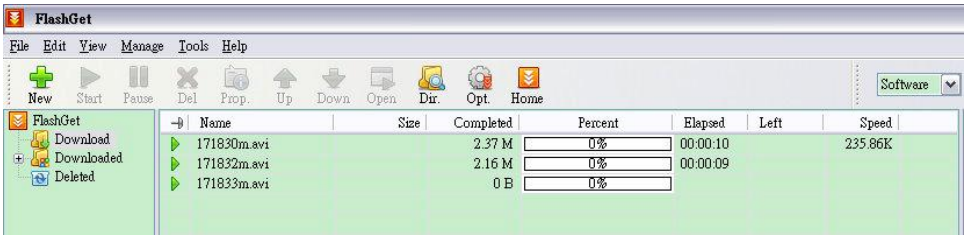
(ii) Open FlashGet, select "File" → "Import" → "Import list", and find the link list file you just saved. The file name may be called “SD_list”.



(iii) FlashGet will show you the link list. You can tick the files you want to copy to your PC. Give the directory path in the new download window, and remember to enable "Login to Server": key in the IP Camera username and password.



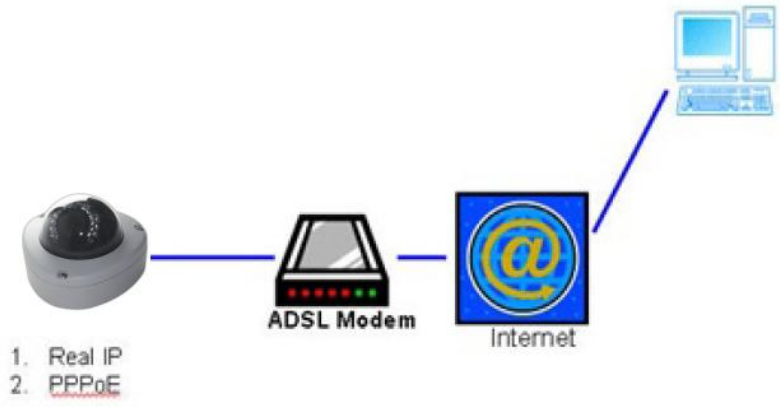
(iv) Click “OK” to start download.



- FlashGet is free software that can be downloaded from the FlashGet official website. The example above is based on FlashGet ver.1.9.6.

VI. Network Configuration

I. Configuration 1:



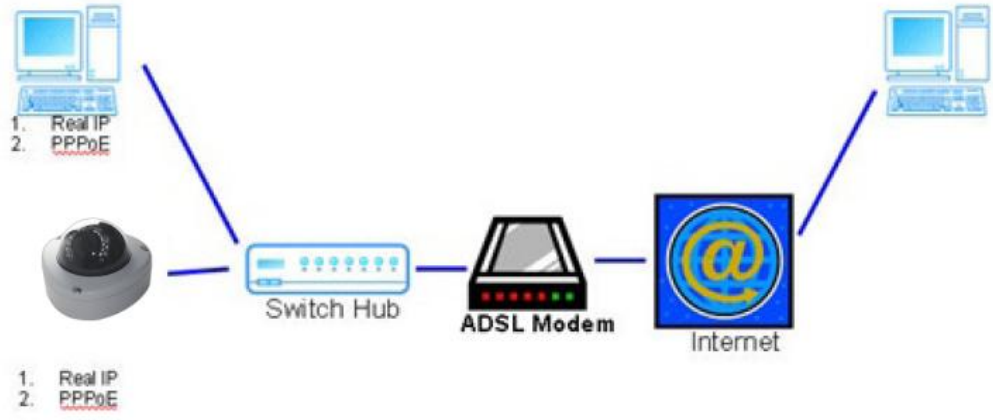
a. Internet Access: ADSL or Cable Modem

b. IP address: One real IP or one dynamic IP

c. Only the IP Camera is connected to the internet

d. For fixed real IP, set up the IP into IP Camera. For dynamic IP, start PPPoE.

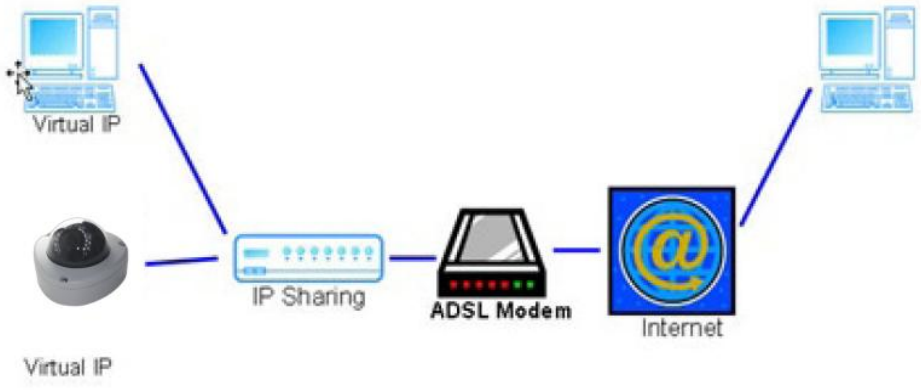
II. Configuration 2:



a. Internet Access: ADSL or Cable Modem

b. IP address: More than one real IP or one dynamic IP
c. The IP Camera and the PC are connected to the internet
d. Device needed: Switch Hub
e. For fixed real IP, set up the IP into IP Camera and PC.
   For dynamic IP, start PPPoE.

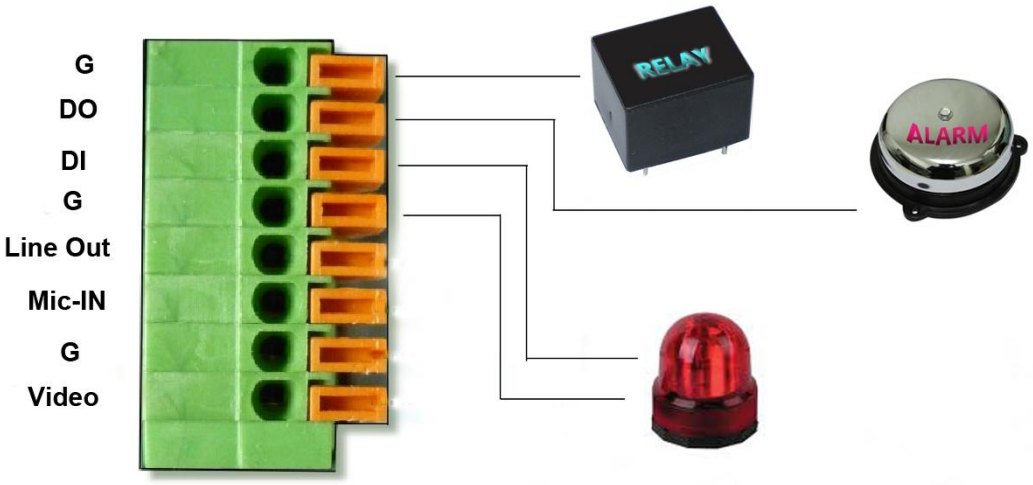
III. Configuration 3:



a. Internet Access: ADSL or Cable Modem
b. IP address: one real IP or one dynamic IP
c. The IP Camera and the PC are connected to the internet
d. Device needed: IP sharing
e. Use virtual IP, set up port forwarding in IP sharing.

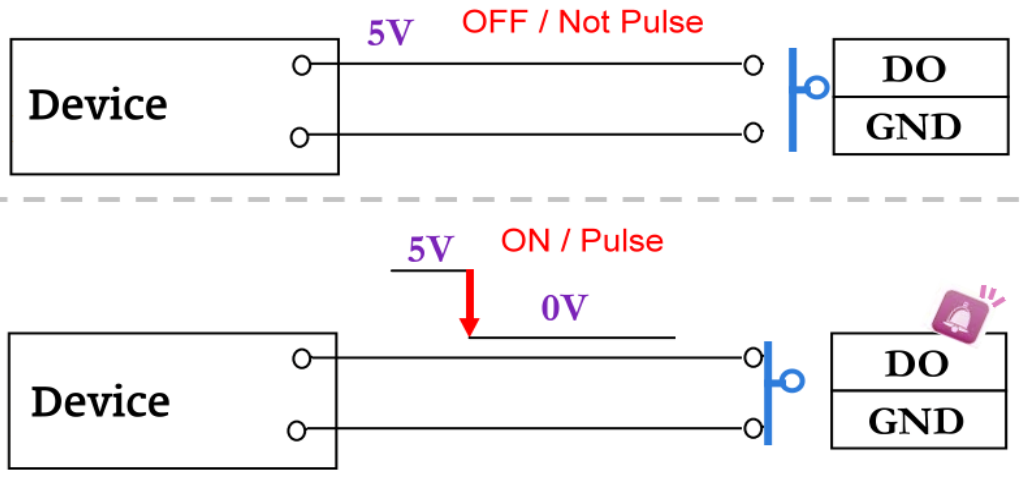
VII. I/O Configuration

1. I/O Connection



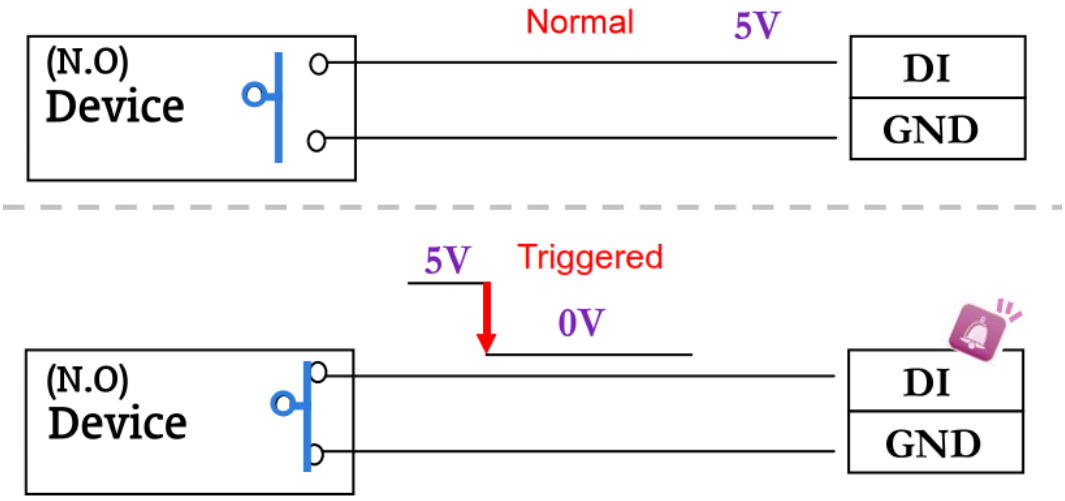
a. Connect the GND & DO pin to the external relay (buzzer) device. Connect the GND & DI pin to the external trigger device.

When no event occurs, the DO output is 5V (DO and GND are disconnected). When the camera detects any event it triggers the external alarm; the DO output is 0V (DO and GND are connected).



f you select "N.O" in "Input sensor setting", when the device or circuit makes DI and the GND pin disconnected, the camera input alarm is triggered and executes the action the user has set: send snapshot to E-mail address.

If you select "N.C" in "Input sensor setting", when the external device or circuit makes DI and GND pin connected, the camera input alarm is triggered, and executes the action the user has set: send snapshot to E-mail address.

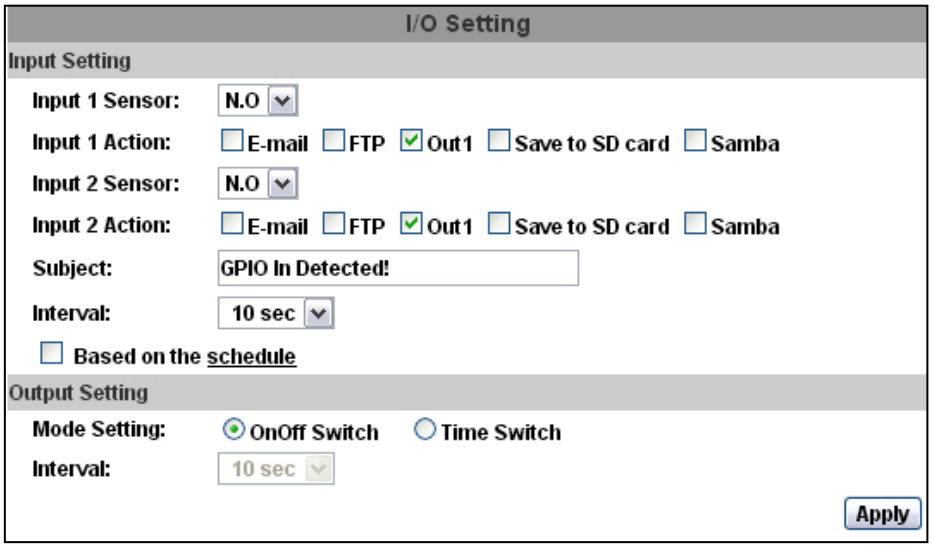


b. I/O PIN definition

- **G (Ground):** Initial state is LOW
- **DO (Digital Output):** DC 5V
- **DI (Digital Input):** Max. 50mA, DC 5V

2. I/O Setup

a. Click I/O Setting from the system setup page via IE, and check “Out1” to enable I/O signal.

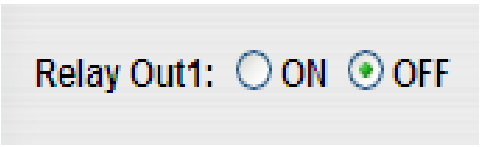


b. Output Test

After the external input and output hardware is installed, you can use the "Relay Out" bottom on the live video page to test if the DO / Relay Out works.

(i) On Off Switch mode:

Clicking "ON" will trigger the external output device for 10 seconds. For example, your alarm buzzer will continuously ring for 10 seconds. After 10 seconds the buzzer will stop ringing, or you can manually break off the output signal by clicking "OFF".



(ii) Time Switch mode:

Click "Pulse", the camera will trigger the external output device for several seconds; the duration length is according to the "interval" setting in Output Setting.

VIII. Factory Default

If you forget your password, please follow the steps to revert back to default value.

• Remove the power and Ethernet cable. Press and hold the button shown in the picture below.

• Connect the power to the camera again, and do not release the button during the system booting. It will take around 30 seconds to boot the camera.

• Release the button after the camera finishes booting.

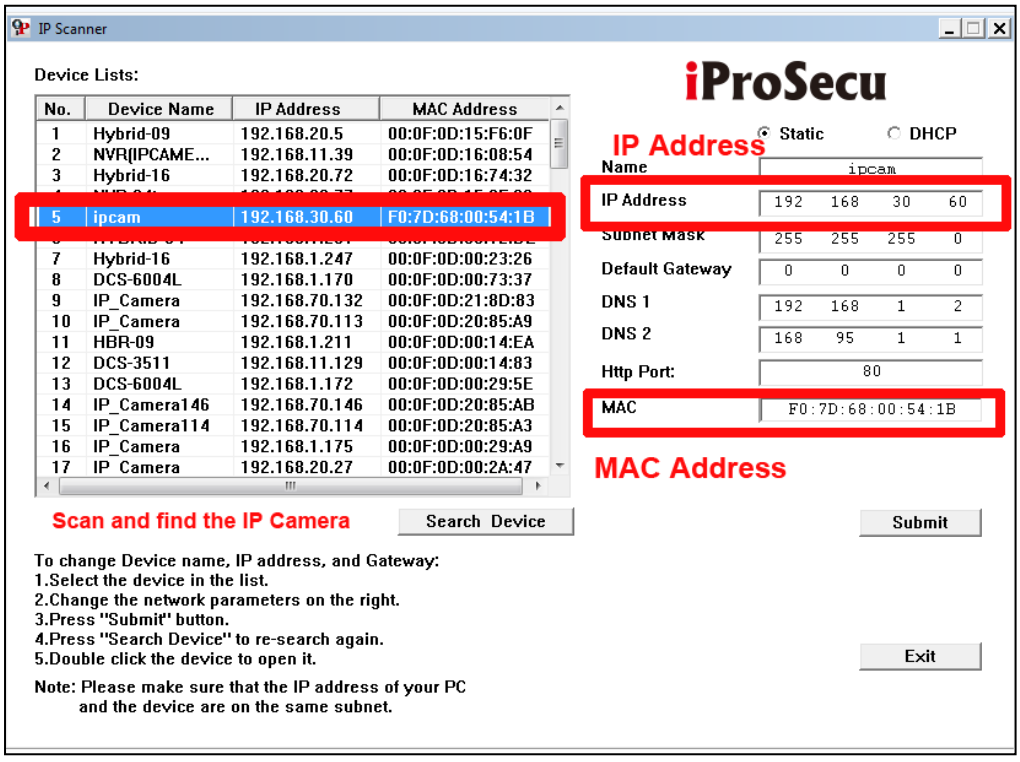
• Plug-in the Ethernet cable. Re-login the camera using the default IP (http://192.168.1.200). Username: **admin**, password: **admin**.

IX. Universal Password

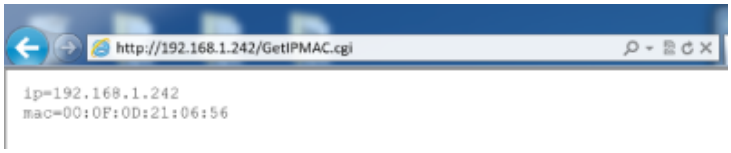
If you forgot the password of your IP camera, you can reset the camera to factory default, or follow the procedure below to generate a universal password.

Note: Universal password will be valid only when you enable the function in “User Management”.

1. First, you need to know the IP address and MAC of your IP camera. You can use IP Scanner to scan the LAN, and see the IP address and MAC on the side column.

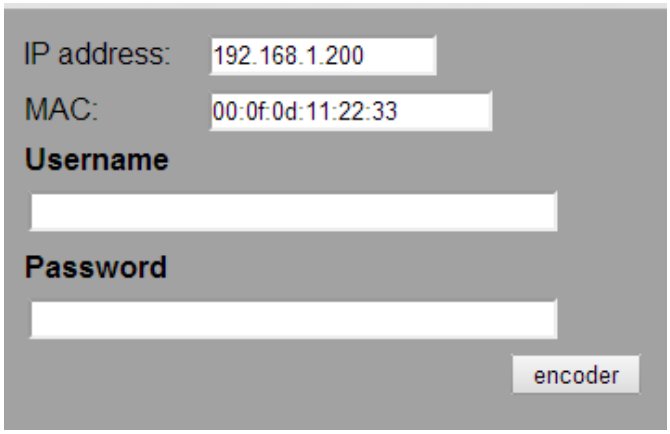
Or, 

if you already know the IP address of the camera: Open the web browser, key in “http:// (IP address) /GetIPMAC.cgi” and press enter. The IP address and MAC will be displayed on browser.



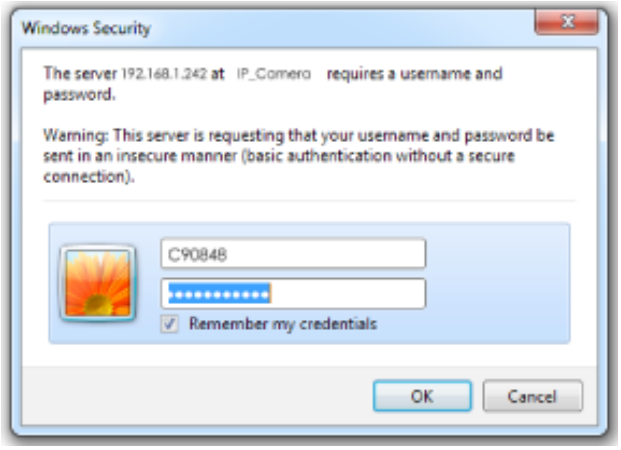
2. Find the .html file named “Universal Password” in CD-ROM. Click to open it.

3. Key in the camera IP address “IP address.” column and MAC in “MAC” column, and then click “encoder”. You will see a set of username and password appear, as below:

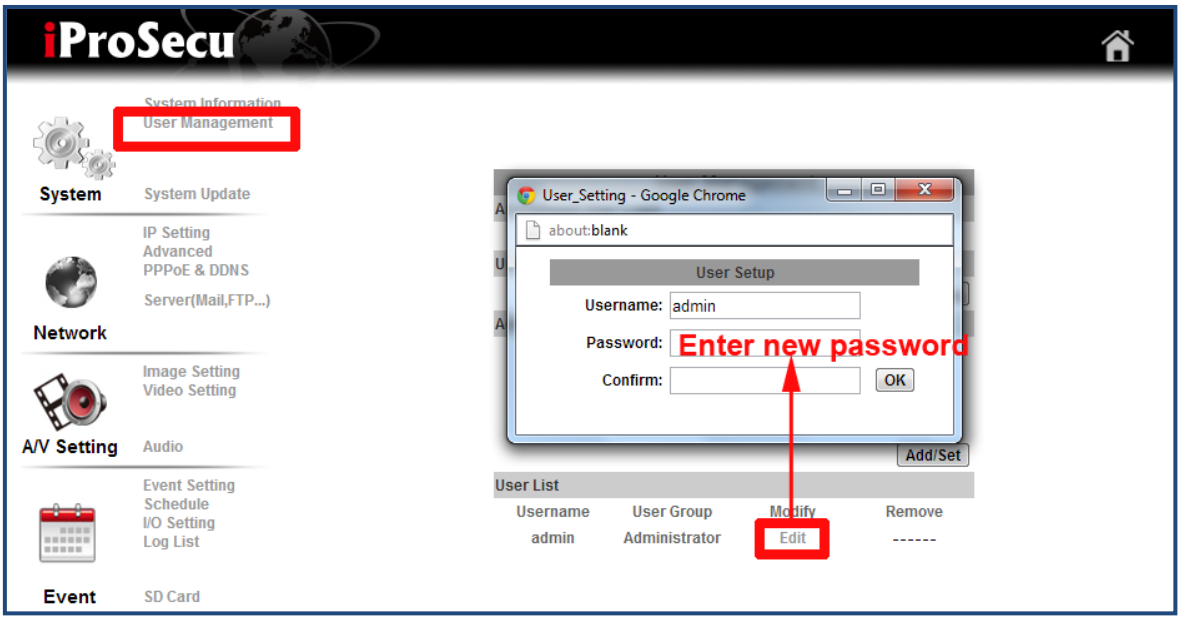


The universal username and password are generated from the IP address and MAC you key-in, so if you change the camera IP address the universal password changes, too.

4. Use the generated universal username and password to log into the camera.

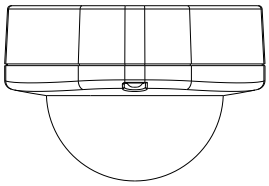
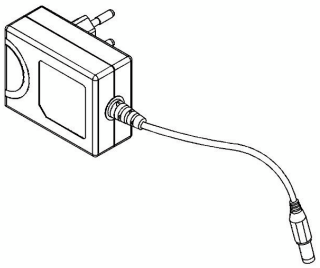
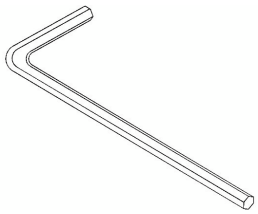
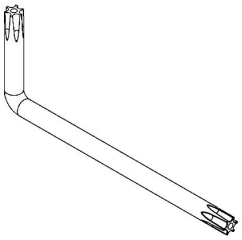
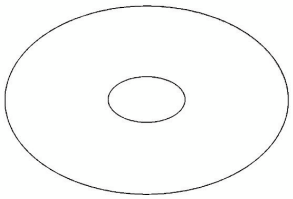
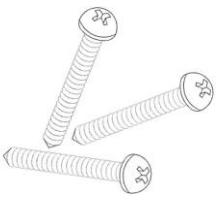
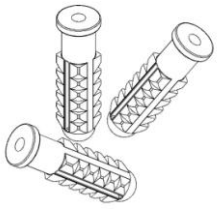

Windows Security
The server 192.168.1.242 at IP_Camera requires a username and password.
Warning: This server is requesting that your username and password be sent in an insecure manner (basic authentication without a secure connection).
C90848
Remember my credentials
OK
Cancel

5. Now you can login as the administrator. The use of the universal password does not affect the previous user settings, so the administrator account password will not change until you edit it. Please click “Edit” to give a new administrator password.



X. Package contents

- The CD includes user manual and software tools

IP Camera	Adaptor	Quick Installation Guide
		
Hex Wrench	Star Wrench	CD
		
Screws x4	O-ring x4	Wall Plug x4
		

XI. Micro SD Card Compatibility

The following Micro SD Cards are recommended:

Transcend	SDHC	class4	16GB
	SDHC	class4	32GB
	SD	class4	16GB
	SD	class4	32GB
	SDHC	class6	4GB
	SDHC	class6	8GB
	SDHC	class6	16GB
	SD	class6	4GB
	SD	class6	8GB
	SD	class6	16GB
SanDisk	SDHC	class4	4GB
	SDHC	class4	8GB
	SDHC	class4	16GB